

# US Army Corps of Engineers

Toxic and Hazardous Materials Agency Final

**ASBESTOS SURVEY RESULTS** 

Volume II

Fort Douglas Environmental Investigation/Alternatives Analysis

> Contract No. DAAA15-90-D-0018 Task Order 0005, Data Item A009

Prepared by:
R.L. Stollar & Associates Inc.
URS Consultants, Inc.
PTI Environmental Health, Inc.
Urie Environmental Health, Inc.
DataChem Laboratories
Environmental Hazards Specialists
International, Inc.

Prepared for: U.S. Army Toxic and Hazardous Materials Agency Aberdeen Proving Ground, Maryland 21010-5401

December 1991

Distribution Unlimited Approved for Public Release

#### FINAL

#### ASBESTOS SURVEY RESULTS FOR FORT DOUGLAS, UTAH

#### DECEMBER 1991

CONTRACT NO. DAAA-15-90-D-0018

TASK ORDER 0005

FORT DOUGLAS
ENVIRONMENTAL INVESTIGATION/ALTERNATIVES ANALYSIS

#### **VOLUME II**

Prepared by:

R. L. STOLLAR & ASSOCIATES INC.
URS CONSULTANTS, INC.
PTI ENVIRONMENTAL SERVICES
URIE ENVIRONMENTAL HEALTH, INC.
DATACHEM LABORATORIES
ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
ENVIRONMENTAL HAZARDS SPECIALISTS INTERNATIONAL, INC.

#### Prepared for:

U.S. ARMY TOXIC AND HAZARDOUS MATERIALS AGENCY

THE VIEWS, OPINIONS, AND/OR FINDINGS CONTAINED IN THIS REPORT ARE THOSE OF THE AUTHOR(S) AND SHOULD NOT BE CONSTRUED AS AN OFFICIAL DEPARTMENT OF THE ARMY POSITION, POLICY, OR DECISION, UNLESS SO DESIGNATED BY OTHER DOCUMENTATION.

THE USE OF TRADE NAMES IN THIS REPORT DOES NOT CONSTITUTE AN OFFICIAL ENDORSEMENT OR APPROVAL OF THE USE OF SUCH COMMERCIAL PRODUCTS. THE REPORT MAY NOT BE CITED FOR PURPOSES OF ADVERTISEMENT.

#### TABLE OF CONTENTS

	PAGE
VOLUME I	
EXECUTIVE SU	MMARY I
1.0 INTRODUC	CTION
	SK DESCRIPTION
2.0 ASSESSMENT	T OF SURVEY RESULTS BY HOMOGENOUS MATERIAL 4
2.1 TH	ERMAL SYSTEM INSULATION
2.1 2.1 2.1 2.1 2.1 2.1	.2       JOINT COMPOUND       4         .3       JOINT COMPOUND ON FIBERGLASS       4         .4       MAG-BLOCK INSULATION       5         .5       PAPER PIPE WRAP INSULATION       5
2.2 SUF	REFACING MATERIALS
2.2.	1 Soundproofing Material
2.3 MIS	SCELLANEOUS MATERIALS 6
2.3. 2.3. 2.3. 2.3. 2.3. 2.3. 2.3. 2.3.	2       CEILING AND WALL PLASTER       6         3       CEILING PAPER       6         4       CEILING SHEET PANELS       7         5       CONCRETE EXPANSION/JOINT MATERIAL       7         6       LINOLEUM       7         7       ROOF SEALANT       7         8       ROOF SHINGLES       7         9       SHEETROCK       8         10       SHEETROCK/JOINT COMPOUND       8         11       TAR PAPER       8         12       TEXTURED PLASTER       8         13       TRANSITE PANELS       8         14       WHITE POWDER (UNKNOWN)       9         15       WIRE WRAP       9         16       9x9 FLOOR TILES       9         17       12x12 FLOOR TILES       9         18       12x12 CEILING TILES       9
2.3.	

## TABLE OF CONTENTS (continued)

		1	PAGE
3.0	ASSESSM	MENT OF SURVEY RESULTS BY BUILDING	. 11
	3.1	BUILDING 1A	. 11
	3.2	BUILDING 1B	
	3.3	BUILDING 2A	
	3.4	BUILDING 2B	
	3.5	BUILDING 3	
	3.6		
	3.7	=	
	3.8	BUILDING 6A	
	3.9	BUILDING 6B	
	3.10	BUILDING 7A	
	3.11	BUILDING 7B	
	3.12	BUILDING 8A	
	3.13	BUILDING 8B	-
	3.14	BUILDING 9A	
	3.15	BUILDING 9B	
	3.16	BUILDING 10A	
	3.17	BUILDING 10B	
	3.18	BUILDING 11A	
	3.19	BUILDING 11B	
	3.20	BUILDING 12A	
	3.21	BUILDING 12B	
	3.22	BUILDING 13A	
	3.23	BUILDING 13B	
	3.24	BUILDING 14A	
	3.25	BUILDING 14B	
	3.26	Building 15A	
	3.27	BUILDING 15B	
	3.28	Building 16A	
	3.29	Building 16B	
	3.30	BUILDING 17A	
	3.31	Building 17B	
	3.32	BUILDING 18A	
	3.33	BUILDING 18B	
	3.34	BUILDING 18C	
	3.35	BUILDING 19A	
	3.36	BUILDING 19B	
	3.37	Building 19C	
	3.38	BUILDING 20	
	3.39	BUILDING 21	
	3.40	BUILDING 22	
	3.41	BUILDING 23	-
	3.42	Building 24	
	3.43	Building 25	
	3.44	Building 31	
	3.45	Building 32	
	3.46	Building 37	
	3.47	Building 39	. 21

## TABLE OF CONTENTS (continued)

	PAC	ЭE
3.58 BUILDIN 3.59 BUILDIN 3.60 BUILDIN 3.61 BUILDIN 3.62 BUILDIN 3.63 BUILDIN 3.64 BUILDIN 3.65 BUILDIN 3.66 BUILDIN 3.67 BUILDIN 3.68 BUILDIN 3.69 BUILDIN 3.70 BUILDIN 3.71 BUILDIN 3.72 BUILDIN 3.73 BUILDIN	IG 41 IG 48 IG 49 IG 50 IG 51 IG 52 IG 53 IG 54 IG 556 IG 56A IG 56B IG 57B IG 58B IG 59 IG 60A IG 60B IG 61 IG 62 IG 63 IG 64A IG 64B IG 65A IG 65B IG 65A IG 65B IG 65A	21 21 22 22 22 22 22 23 23 23 23 24 24 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26
		27 27
		27
		27
4.0 APPROACHES T	O REMEDIATION OF MATERIALS CONTAINING ASBESTOS	29
		29 29
5.0 REFERENCES		31
VOLUME II		
APPENDIX A	Analytical Results for Asbestos Sampling at Fort Douglas, Utah, Excesse Area	d
APPENDIX B	Locations of Asbestos Samples at Fort Douglas, Utah, Excessed Area	
APPENDIX C	Photographics of Suspect ACM at Fort Douglas, Utah, Excessed Area	

#### LIST OF TABLES

Table 2.1-1	Summary of Asbestos Survey Results for Air-Cell Insulation
Table 2.1-2	Summary of Asbestos Survey Results for Joint Compound
Table 2.1-3	Summary of Asbestos Survey Results for Joint Compound on Fiberglass
Table 2.1-4	Summary of Asbestos Survey Results for MAG-Block Insulation
Table 2.1-5	Summary of Asbestos Survey Results for Paper Pipe Wrap Insulation
Table 2.1-6	Summary of Asbestos Survey Results for Wool Pipe Wrap Insulation
Table 2.2-1	Summary of Asbestos Survey Results for Soundproofing
Table 2.3-1	Summary of Asbestos Survey Results for Adhesive Materials
Table 2.3-2	Summary of Asbestos Survey Results for Ceiling and Wall Plaster
Table 2.3-3	Summary of Asbestos Survey Results for Ceiling Paper
Table 2.3-4	Summary of Asbestos Survey Results for Ceiling Sheet Panels
Table 2.3-5	Summary of Asbestos Survey Results for Concrete Expansion/Joint Materials
Table 2.3-6	Summary of Asbestos Survey Results for Linoleum
Table 2.3-7	Summary of Asbestos Survey Results for Roof Sealant
Table 2.3-8	Summary of Asbestos Survey Results for Roof Shingles
Table 2.3-9	Summary of Asbestos Survey Results for Sheetrock
Table 2.3-10	Summary of Asbestos Survey Results for Sheetrock/Joint Compound
Table 2.3-11	Summary of Asbestos Survey Results for Tar Paper
Table 2.3-12	Summary of Asbestos Survey Results for Textured Plaster
Table 2.3-13	Summary of Asbestos Survey Results for Transite Panels
Table 2.3-14	Summary of Asbestos Survey Results for White Powder (unknown)
Table 2.3-15	Summary of Asbestos Survey Results for Wire Wrap
Table 2.3-16	Summary of Asbestos Survey Results for 9x9 Floor Tiles
Table 2.3-17	Summary of Asbestos Survey Results for 12x12 Floor Tiles
Table 2.3-18	Summary of Asbestos Survey Results for 12x12 Ceiling Tiles
Table 2.3-19	Summary of Asbestos Survey Results for 2x4 Ceiling Panels
Table 2.3-20	Summary of Asbestos Survey Results for 2x2 Ceiling Panels
Table 3.1-1	Summary of Asbestos Survey Results for Building 1A
Table 3.2-1	Summary of Asbestos Survey Results for Building 1B
Table 3.3-1	Summary of Asbestos Survey Results for Building 2A
Table 3.4-1	Summary of Asbestos Survey Results for Building 2B
Table 3.5-1	Summary of Asbestos Survey Results for Building 3
Table 3.6-1	Summary of Asbestos Survey Results for Building 4

## LIST OF TABLES (continued)

Table 3.7-1	Summary of Asbestos Survey Results for Building 5
Table 3.8-1	Summary of Asbestos Survey Results for Building 6A
Table 3.9-1	Summary of Asbestos Survey Results for Building 6B
Table 3.10-1	Summary of Asbestos Survey Results for Building 7A
Table 3.11-1	Summary of Asbestos Survey Results for Building 7B
Table 3.12-1	Summary of Asbestos Survey Results for Building 8A
Table 3.13-1	Summary of Asbestos Survey Results for Building 8B
Table 3.14-1	Summary of Asbestos Survey Results for Building 9A
Table 3.15-1	Summary of Asbestos Survey Results for Building 9B
Table 3.16-1	Summary of Asbestos Survey Results for Building 10A
Table 3.17-1	Summary of Asbestos Survey Results for Building 10B
Table 3.18-1	Summary of Asbestos Survey Results for Building 11A
Table 3.19-1	Summary of Asbestos Survey Results for Building 11B
Table 3.20-1	Summary of Asbestos Survey Results for Building 12A
Table 3.21-1	Summary of Asbestos Survey Results for Building 12B
Table 3.22-1	Summary of Asbestos Survey Results for Building 13A
Table 3.23-1	Summary of Asbestos Survey Results for Building 13B
Table 3.24-1	Summary of Asbestos Survey Results for Building 14A
Table 3.25-1	Summary of Asbestos Survey Results for Building 14B
Table 3.26-1	Summary of Asbestos Survey Results for Building 15A
Table 3.27-1	Summary of Asbestos Survey Results for Building 15B
Table 3.28-1	Summary of Asbestos Survey Results for Building 16A
Table 3.29-1	Summary of Asbestos Survey Results for Building 16B
Table 3.30-1	Summary of Asbestos Survey Results for Building 17A
Table 3.31-1	Summary of Asbestos Survey Results for Building 17B
Table 3.32-1	Summary of Asbestos Survey Results for Building 18A
Table 3.33-1	Summary of Asbestos Survey Results for Building 18B
Table 3.34-1	Summary of Asbestos Survey Results for Building 18C
Table 3.35-1	Summary of Asbestos Survey Results for Building 19A
Table 3.36-1	Summary of Asbestos Survey Results for Building 19B
Table 3.37-1	Summary of Asbestos Survey Results for Building 19C
Table 3.38-1	Summary of Asbestos Survey Results for Building 20
Table 3.39-1	Summary of Asbestos Survey Results for Building 21
Table 3.40-1	Summary of Asbestos Survey Results for Building 22

## LIST OF TABLES (continued)

Table 3.41-1	Summary of Asbestos Survey Results for Building 23
Table 3.42-1	Summary of Asbestos Survey Results for Building 24
Table 3.43-1	Summary of Asbestos Survey Results for Building 25
Table 3.44-1	Summary of Asbestos Survey Results for Building 31
Table 3.45-1	Summary of Asbestos Survey Results for Building 32
Table 3.46-1	Summary of Asbestos Survey Results for Building 37
Table 3.47-1	Summary of Asbestos Survey Results for Building 39
Table 3.49-1	Summary of Asbestos Survey Results for Building 48
Table 3.50-1	Summary of Asbestos Survey Results for Building 49
Table 3.51-1	Summary of Asbestos Survey Results for Building 50
Table 3.52-1	Summary of Asbestos Survey Results for Building 51
Table 3.53-1	Summary of Asbestos Survey Results for Building 52
Table 3.54-1	Summary of Asbestos Survey Results for Building 53
Table 3.55-1	Summary of Asbestos Survey Results for Building 54
Table 3.56-1	Summary of Asbestos Survey Results for Building 55
Table 3.57-1	Summary of Asbestos Survey Results for Building 56A
Table 3.58-1	Summary of Asbestos Survey Results for Building 56B
Table 3.59-1	Summary of Asbestos Survey Results for Building 57A
Table 3.60-1	Summary of Asbestos Survey Results for Building 57B
Table 3.61-1	Summary of Asbestos Survey Results for Building 58A
Table 3.62-1	Summary of Asbestos Survey Results for Building 58B
Table 3.63-1	Summary of Asbestos Survey Results for Building 59
Table 3.64-1	Summary of Asbestos Survey Results for Building 60A
Table 3.65-1	Summary of Asbestos Survey Results for Building 60B
Table 3.66-1	Summary of Asbestos Survey Results for Building 61
Table 3.67-1	Summary of Asbestos Survey Results for Building 62
Table 3.68-1	Summary of Asbestos Survey Results for Building 63
Table 3.69-1	Summary of Asbestos Survey Results for Building 64A
Table 3.70-1	Summary of Asbestos Survey Results for Building 64B
Table 3.71-1	Summary of Asbestos Survey Results for Building 65A
Table 3.72-1	Summary of Asbestos Survey Results for Building 65B
Table 3.73-1	Summary of Asbestos Survey Results for Building 66A
Table 3.74-1	Summary of Asbestos Survey Results for Building 66B
Table 3.75-1	Summary of Asbestos Survey Results for Building 69

## LIST OF TABLES (continued)

Table 3.76-1	Summary of Asbestos Survey Results for Building 350
Table 3.77-1	Summary of Asbestos Survey Results for Building 351
Table 4.1-1	Asbestos Abatement Estimates
Table 4.1-2	Determination of an Assessment Index
Table 4.1.3	Recommended Corrective Actions for Asbestos Containing Materials

## LIST OF FIGURES

Figure 1-1	Fort Douglas Location Map	
Figure 1-2	Site Plan Fort Douglas	

Figure 1-3 Excessed Area Structure Locations Fort Douglas

#### LIST OF ACRONYMS AND ABBREVIATIONS

ACM asbestos containing materials

ACBM asbestos containing building materials

AHERA Asbestos Hazard Emergency Response Act

DEH Directorate of Engineering and Housing

EI Environmental Investigation

EPA U.S. Environmental Protection Agency

f/cc fibers per cubic centimeter

HASP Health and Safety Plan

Misc Miscellaneous materials

NCO non commissioned officer

O & M Operations and Maintenance

PA Preliminary Assessment

QAPP Quality Assurance Project Plan

QC quality control

SM surfacing materials

Stollar R.L. Stollar and Associates

TSI thermal system insulation

USATHAMA United States Army Toxic and Hazardous Materials Agency

Appendix A

Analytical Results for Asbestos Sampling at Fort Douglas, Utah, Excessed Area

Analytical Results For Fort Douglas Asbestos Sampling

Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
Air Cell Insulation Ceiling Sheet Panels	TSI Misc	1A-001 1A-002	06/10/91 06/10/91		35.0 LT 0.5
2x4 Ceiling Panels	Misc	1A-003	06/10/91		LT 0.5
Joint Compound	TSI	1A-004	06/17/91		40.0
Joint Compound	TSI	1A-004	06/17/91		40.0
Sheetrock Linoleum	Misc Misc	1A-005	06/10/91 06/10/91		LT 0.5 LT 0.5
Linoleum	Misc	1A-006 1A-007	06/10/91		30.0
Linoleum	Misc	1A-007	06/10/91		12.0
Joint Compound	TSI	1B-001	06/17/91		40.0
Joint Compound	TSI	1B-001	06/17/91		45.0
Air Cell Insulation	TSI	1B-002	06/17/91		35.0
Linoleum Air Cell Insulation	Misc TSI	1B-003 2A-001	06/17/91 06/11/91		LT 0.5 60.0
Joint Compound	TSI	2A-001 2A-002	06/11/91		30.0
Ceiling and Wall Plaster	Misc	2A-003	06/11/91		LT 0.5
Ceiling and Wall Plaster	Misc	2A-003	06/11/91	D	LT 0.5
Textured Plaster	Misc	2A-004	06/11/91		2.0
Linoleum	Misc	2A-005	06/11/91		LT 0.5
Linoleum Linoleum	Misc Misc	2A-006 2A-007	06/11/91 06/11/91		13.0 LT 0.5
Sheetrock	Misc	2A-007	06/11/91		LT 0.5
Linoleum	Misc	2A-009	06/11/91		3.0
Air Cell Insulation	TSI	2B-001	06/10/91		LT 0.5
Air Cell Insulation	TSI	2B-002	06/10/91		30.0
Air Cell Insulation	TSI	2B-003	06/10/91		40.0
Ceiling and Wall Plaster Ceiling and Wall Plaster	Misc Misc	2B-004 2B-004	06/10/91 06/10/91		LT 0.5 LT 0.5
Linoleum	Misc	2B-004 2B-005	06/10/91		LT 0.5
Linoleum	Misc	2B-006	06/10/91		50.0
Linoleum	Misc	2B-007	06/10/91		LT 0.5
Sheetrock/Joint Compound	Misc	2B-008	06/10/91		LT 0.5
Linoleum	Misc	2B-009	06/10/91		LT 0.5
Wire Wrap Air Cell Insulation	Misc TSI	3-001 3-002	06/11/91 06/11/91		LT 0.5 65.0
Air Cell Insulation	TSI	3-002	06/11/91		65.0
Linoleum	Misc	3-003	06/11/91		LT 0.5
Linoleum	Misc	3-004	06/11/91		25.0
Linoleum	Misc	3-005	06/11/91		LT 0.5
Linoleum	Misc	4-001	06/18/91		LT 0.5
Linoleum Linoleum	Misc Misc	4-002 4-002	06/18/91 06/18/91		LT 0.5 LT 0.5
Linoleum	Misc	4-002	06/18/91		20.0
Air Cell Insulation	TSI	4-004	06/18/91		35.0
Linoleum	Misc	4-005	06/18/91		LT 0.5
Linoleum	Misc	4-006	06/18/91		15.0
Adhesive Materials	Misc	4-007	06/18/91		LT 0.5
MAG-Block Insulation 2x4 Ceiling Panels	TSI Misc	4-008 5-001	06/18/91 06/20/91		LT 0.5 LT 0.5
2x4 Ceiling Panels	Misc	5-001	06/20/91		LT 0.5
Linoleum	Misc	5-002	06/20/91		24.0
Linoleum	Misc	5-003	06/20/91		LT 0.5
9x9 Floor Tiles	Misc	5-004	06/20/91		3.0

Analytical Results For Fort Douglas Asbestos Sampling

Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
	Wina	E-00E	06/20/91		LT 0.5
2x4 Ceiling Panels	Misc	5-005 5-006	06/20/91		24.0
Linoleum	Misc TSI	6A-001	06/12/91		40.0
Air Cell Insulation	TSI	6A-002	06/12/91		20.0
Joint Compound	TSI	6A-002	06/12/91		20.0
Joint Compound	Misc	6A-003	06/12/91		20.0
Linoleum Linoleum	Misc	6A-004	06/12/91		LT 0.5
Air Cell Insulation	TSI	6B-001	06/12/91		60.0
Sheetrock	Misc	6B-002	06/12/91		LT 0.5
Ceiling and Wall Plaster	Misc	6B-003	06/12/91		LT 0.5
Ceiling and Wall Plaster	Misc	6B-003	06/12/91		LT 0.5
Linoleum	Misc	6B-004	06/12/91		LT 0.5
Linoleum	Misc	6B-005	06/12/91		20.0
Linoleum	Misc	6B-006	06/12/91		25.0
Linoleum	Misc	6B-007	06/12/91		LT 0.5
Air Cell Insulation	TSI	7A-001	06/13/91		25.0
Joint Compound	TSI	7A-002	06/13/91		30.0
Joint Compound	TSI	7A-002	06/13/91		30.0
Linoleum	Misc	7A-003	06/13/91		20.0 60.0
Air Cell Insulation	TSI	7B-001	06/22/91		55.0
Air Cell Insulation	TSI	7B-001	06/22/91 06/22/91		25.0
Joint Compound	TSI	7B-002	06/22/91		30.0
MAG-Block Insulation	TSI Misc	7B-003 7B-004	06/22/91		LT 0.5
Linoleum	TSI	8A-001	06/11/91		30.0
MAG-Block Insulation	TSI	8A-002	06/11/91		35.0
Air Cell Insulation	TSI	8A-003	06/11/91		30.0
Joint Compound Joint Compound	TSI	8A-003	06/11/91		35.0
Joint compound on Fiberglass	TSI	8A-004	06/11/91		LT 0.5
Sheetrock/Joint Compound	Misc	8A-005	06/11/91		LT 0.5
Sheetrock	Misc	8A-006	06/11/91		LT 0.5
Linoleum	Misc	8A-007	06/11/91		21.0
Linoleum	Misc	8A-008	06/11/91		LT 0.5
Sheetrock	Misc	8B-001	06/10/91		LT 0.5
Ceiling and Wall Plaster	Misc	8B-002	06/10/91		LT 0.5
Linoleum	Misc	8B-003	06/10/91		LT 0.5 25.0
Linoleum	Misc	8B-004	06/10/91		25.0
Linoleum	Misc	8B-004	06/10/91		36.0
Linoleum	Misc	8B-005	06/10/91 06/10/91		30.0
Linoleum	Misc	8B-006 8B-007	06/10/91		LT 0.5
Joint compound on Fiberglass	TSI TSI	8B-008	06/10/91		75.0
Air Cell Insulation	Misc	8B-011	06/11/91		LT 0.5
Joint Compound MAG-Block Insulation	TSI	9A-001	06/14/91		15.0
MAG-Block Insulation	TSI	9A-001	06/14/91		15.0
Ceiling and Wall Plaster	Misc	9A-002	06/14/91		LT 0.5
Joint compound on Fiberglass	Misc	9A-003	06/14/91	L	LT 0.5
Linoleum	Misc	9A-004	06/14/93		20.0
12x12 Ceiling Tiles	Misc	9A-005	06/14/93		LT 0.5
Joint Compound	TSI	9B-001	06/19/93	L	20.0
Air Cell Insulation	TSI	9B-002	06/19/93		30.0
Air Cell Insulation	TSI	9B-002	06/19/93		35.0
Air Cell Insulation	TSI	10A-001	06/18/93	T	70.0

D - Duplicate Sample LT - Less Than All Level 1 Data

Joint Compound TSI 10A-002 06/18/91	70.0
Wire Wrap Misc 10B-001 06/11/91 LT 0 MAG-Block Insulation TSI 10B-002 06/11/91	30.0
MAG-Block Insulation TSI 10B-002 06/11/91 Joint Compound TSI 10B-003 06/11/91 LT (	
	65.0
	26.0
Adhesive Materials Misc 10B-006 06/11/91 LT	
Linoleum Misc 10B-007 06/11/91 LT (	
Transite Panels Misc 10B-008 06/11/91	2.0
	2.0
2x4 Ceiling Panels Misc 11A-001 06/18/91 LT (	
2x4 Ceiling Panels Misc 11A-001 06/18/91 D LT	
	30.0
Air Cell Insulation TSI 11A-003 06/18/91 Insulation Misc 11A-004 06/18/91 LT (	
	35.0
Sheetrock Misc 11B-002 06/20/91 LT (	
Linoleum Misc 11B-003 06/20/91 LT (	
Linoleum Misc 11B-004 06/20/91 LT (	0.5
Linoleum Misc 11B-005 06/20/91 LT (	
Sheetrock Misc 11B-002 06/20/91 D LT (	
기프 그는	45.0
	40.0
Roof Shingles Misc 12A-003 06/24/91 LT ( Tar Paper Misc 12A-004 06/24/91 LT (	
그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	45.0
	45.0
	30.0
Ceiling and Wall Plaster Misc 12B-003 06/13/91 LT (	
	25.0
Linoleum Misc 12B-005 06/13/91 LT (	
Linoleum Misc 12B-006 06/13/91 LT (	
Ceiling and Wall Plaster Misc 12B-003 06/13/91 D LT ( Air Cell Insulation TSI 13A-001 06/17/91	
	40.0
	35.0
- 1.1.1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	35.0
	40.0
	40.0
Joint Compound TSI 14A-002 06/14/91	40.0
	35.0
Linoleum Misc 14A-003 06/14/91 LT (	
	40.0
	45.0
Linoleum Misc 14B-002 06/17/91 LT ( Linoleum Misc 14B-003 06/17/91 LT (	
Wool Pipe Wrap Insulation TSI 15A-001 06/14/91 LT (	
Wool Pipe Wrap Insulation TSI 15A-001 06/14/91 D LT (	
	25.0
Air Cell Insulation TSI 15A-003 06/14/91	30.0
Linoleum Misc 15A-004 06/14/91 2	20.0
Air Cell Insulation TSI 15B-001 06/19/91	35.0

Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
Joint Compound Joint Compound	TSI TSI	15B-002 15B-002	06/19/91 06/19/91	D	25.0 25.0
Linoleum Linoleum	Misc Misc	15B-003 15B-004	06/19/91 06/19/91		LT 0.5 LT 0.5
Linoleum	Misc	15B-005	06/19/91		20.0
Linoleum	Misc	15B-006	06/19/91		LT 0.5
Sheetrock	Misc	15B-007 16A-001	06/19/91 06/25/91		LT 0.5 60.0
Air Cell Insulation Air Cell Insulation	TSI TSI	16A-001	06/25/91	D	60.0
Joint Compound	TSI	16A-002	06/25/91	_	30.0
Linoleum	Misc	16A-003	06/25/91		LT 0.5
Linoleum	Misc TSI	16A-004 16B-001	06/25/91 06/25/91		20.0
Air Cell Insulation Joint Compound	TSI	16B-001	06/25/91		30.0
Joint Compound	TSI	16B-002	06/25/91	D	25.0
Air Cell Insulation	TSI	17A-001	06/18/91		35.0
Joint Compound	TSI Misc	17A-002 17A-003	06/18/91 06/18/91		15.0 LT 0.5
Sheetrock Sheetrock	Misc	17A-003	06/18/91		LT 0.5
Linoleum	Misc	17A-004	06/18/91		LT 0.5
Linoleum	Misc	17A-005	06/18/91		24.0
Linoleum	Misc	17A-006	06/18/91		LT 0.5 2.0
Linoleum Joint Compound	Misc TSI	17A-007 17B-001	06/18/91 06/25/91		25.0
Joint Compound	TSI	17B-001	06/25/91		25.0
Air Cell Insulation	TSI	17B-002	06/25/91		40.0
Air Cell Insulation	TSI	18A-002	06/17/91		35.0
MAG-Block Insulation MAG-Block Insulation	TSI TSI	18A-001 18A-001	06/17/91 06/17/91		35.0 40.0
Wire Wrap	Misc	18A-003	06/17/91		LT 0.5
Linoleum	Misc	18A-004	06/17/91		LT 0.5
Linoleum	Misc	18A-005	06/17/91		LT 0.5
Air Cell Insulation	TSI	18B-001	06/24/91		40.0
Air Cell Insulation Joint Compound	TSI TSI	18B-001 18B-002	06/24/91 06/24/91		30.0
Linoleum	Misc	18B-003	06/24/91		LT 0.5
Ceiling and Wall Plaster	Misc	18C-001	06/12/91		LT 0.5
Ceiling and Wall Plaster	Misc	18C-001	06/12/91		LT 0.5 70.0
Air Cell Insulation Linoleum	TSI Misc	18C-002 18C-003	06/12/91 06/12/91		20.0
2x4 Ceiling Panels	Misc	18C-004	06/12/91		LT 0.5
2x4 Ceiling Panels	Misc	18C-005	06/12/91		LT 0.5
Air Cell Insulation	TSI	19A-001	06/17/91		55.0
Air Cell Insulation	TSI	19A-001 19A-002	06/17/91 06/17/91		45.0 LT 0.5
Linoleum MAG-Block Insulation	Misc TSI	19B-002	06/21/91		27.0
MAG-Block Insulation	TSI	19B-001	06/21/91		27.0
Air Cell Insulation	TSI	19B-002	06/21/91		40.0
Joint Compound	TSI	19C-001	06/24/91		25.0 20.0
Joint Compound Air Cell Insulation	TSI TSI	19C-001 19C-002	06/24/91 06/24/91		60.0
Linoleum	Misc	19C-003	06/24/91		20.0
Air Cell Insulation	TSI	20-001	06/24/91		65.0

Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
Air Cell Insulation	TSI	20-001	06/24/91	D	70.0
Joint Compound Air Cell Insulation	TSI TSI	20-002 21-001	06/24/91 06/21/91		35.0 29.0
MAG-Block Insulation	TSI	21-001	06/21/91		35.0
MAG-Block Insulation	TSI	21-002	06/21/91	D	35.0
Air Cell Insulation	TSI	22-001	06/13/91		LT 0.5
Joint Compound	TSI	22-002	06/13/91	-	25.0
Joint Compound Air Cell Insulation	TSI TSI	22-002 23-001	06/13/91 06/13/91		29.0 40.0
Sheetrock/Joint Compound	Misc	23-001	06/13/91		2.0
Linoleum	Misc	23-003	06/13/91		25.0
Linoleum	Misc	23-004	06/13/91		30.0
Tar Paper	Misc	23-005	06/13/91	<b>D</b>	LT 0.5
Tar Paper Joint Compound	Misc TSI	23-005 24-001	06/13/91 06/22/91	D	LT 0.5 40.0
Air Cell Insulation	TSI	24-001	06/22/91		65.0
Air Cell Insulation	TSI	24-002	06/22/91	D	70.0
Linoleum	Misc	24-003	06/22/91		18.0
Tar Paper	Misc	24-004	06/22/91		LT 0.5
Roof Shingles	Misc	24-005	06/22/91		LT 0.5 LT 0.5
Roof Sealant Air Cell Insulation	Misc TSI	24-006 25-002	06/22/91 06/13/91		65.0
Joint Compound	TSI	25-001	06/13/91		45.0
Joint Compound	TSI	25-001	06/13/91	D	45.0
Linoleum	Misc	25-003	06/13/91		LT 0.5
Linoleum	Misc	25-004	06/13/91		15.0
Sheetrock/Joint Compound 2x4 Ceiling Panels	Misc Misc	25-005 31-001	06/13/91 06/19/91		LT 0.5 LT 0.5
2x4 Ceiling Panels	Misc	31-001	06/19/91	D	LT 0.5
12x12 Floor Tiles	Misc	31-002	06/19/91		LT 0.5
Linoleum	Misc	31-003	06/19/91		LT 0.5
9x9 Floor Tiles	Misc	31-004	06/19/91		2.0
Air Cell Insulation Paper Pipe Wrap Insulation	TSI TSI	32-001 32-002	06/15/91 06/15/91		LT 0.5 15.0
Ceiling Sheet Panels	Misc	32-002	06/15/91		LT 0.5
Ceiling Sheet Panels	Misc	32-003	06/15/91	D	LT 0.5
9x9 Floor Tiles	Misc	37-001	06/17/91		LT 0.5
9x9 Floor Tiles	Misc	37-001	06/17/91	D	LT 0.5
Sheetrock/Joint Compound	Misc	39-001	06/14/91 06/14/91		LT 0.5 LT 0.5
Sheetrock/Joint Compound 12x12 Floor Tiles	Misc Misc	39-001 39-002	06/14/91	D	2.0
Ceiling Sheet Panels	Misc	39-003	06/14/91		LT 0.5
Transite Panels	Misc	48-001	06/14/91		45.0
Linoleum	Misc	48-002	06/14/91		24.0
12x12 Floor Tiles	Misc Misc	48-003	06/14/91		LT 0.5 3.0
9x9 Floor Tiles Paper Pipe Wrap Insulation	TSI	48-004 48-005	06/14/91 06/14/91		30.0
Paper Pipe Wrap Insulation	TSI	48-005	06/14/91	D	30.0
Linoleum	Misc	49-001	06/21/91		24.0
2x4 Ceiling Panels	Misc	49-002	06/21/91		LT 0.5
Soundproofing	SM	49-003	06/21/91	Б.	15.0
Soundproofing 12x12 Floor Tiles	SM Misc	49-003 49-004	06/21/91 06/21/91	D	15.0 LT 0.5
12 X 12 F 1001 TITES	MISC	43 004	00/21/31		ш. 0.5

D - Duplicate Sample LT - Less Than All Level 1 Data

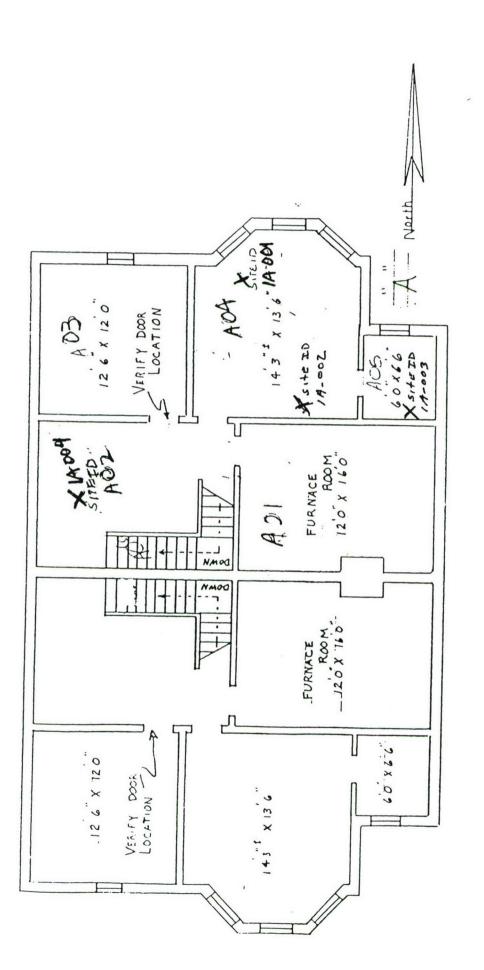
Material	Material	Sample	Sample	QC	Value %
Description	Class	ID	Date	Type	
12x12 Floor Tiles White Powder (unknown) White Powder (unknown) Air Cell Insulation	Misc Misc Misc TSI	49-005 49-006 49-006 49-007	06/21/91 06/21/91 06/21/91 06/21/91	D	LT 0.5 LT 0.5 LT 0.5
Linoleum	Misc	49-008	06/21/91		LT 0.5
2x2 Ceiling Panels	Misc	49-009	06/21/91		LT 0.5
Linoleum	Misc	49-010	06/21/91		20.0
12x12 Floor Tiles	Misc	49-011	06/21/91		LT 0.5
Transite Panels	Misc	50-001	06/15/91	D	55.0
Tar Paper	Misc	50-002	06/15/91		LT 0.5
Tar Paper	Misc	50-002	06/15/91		LT 0.5
Transite Panels	Misc	51-001	06/15/91	D	45.0
Tar Paper	Misc	51-002	06/15/91		LT 0.5
Tar Paper	Misc	51-002	06/15/91		LT 0.5
Sheetrock/Joint Compound	Misc	52-002	06/17/91		LT 0.5
Transite Panels	Misc	52-001	06/17/91	D	60.0
Transite Panels	Misc	52-001	06/17/91		60.0
Linoleum	Misc	52-003	06/17/91		LT 0.5
Linoleum	Misc	52-004	06/17/91		LT 0.5
Paper Pipe Wrap Insulation	TSI	53-001	06/20/91		35.0
Sheetrock	Misc	53-002	06/20/91		LT 0.5
Linoleum	Misc	53-003	06/20/91		LT 0.5
2x2 Ceiling Panels	Misc	53-004	06/20/91		LT 0.5
2x2 Ceiling Panels	Misc	53-004	06/20/91	D	LT 0.5
Linoleum	Misc	53-005	06/20/91		LT 0.5
9x9 Floor Tiles	Misc	54-001	06/12/91		LT 0.5
Sheetrock	Misc	54-002	06/12/91		LT 0.5
Transite Panels	Misc	54-003	06/12/91		15.0
Linoleum	Misc	54-007	06/12/91		15.0
Air Cell Insulation	TSI	54-004	06/12/91		20.0
Linoleum	Misc	54-006	06/12/91		3.0
2x4 Ceiling Panels	Misc	54-005	06/12/91	_	LT 0.5
Soundproofing	SM	54-008	06/12/91		8.0
Soundproofing	SM	54-009	06/12/91		6.0
Soundproofing	SM	54-009	06/12/91	D	9.0
Linoleum	Misc	54-010	06/12/91		20.0
Sheetrock	Misc	54-011	06/12/91		LT 0.5
Linoleum	Misc	55-001	06/18/91		24.0
9x9 Floor Tiles	Misc	55-002	06/18/91	D	8.0
Soundproofing	SM	55-003	06/18/91		12.0
Soundproofing	SM	55-003	06/18/91		16.0
Linoleum	Misc	55-004	06/18/91		21.0
Linoleum Paper Pipe Wrap Insulation Linoleum Linoleum	Misc TSI Misc Misc	55-005 56A-001 56A-002 56A-002	06/18/91 06/12/91 06/12/91	D	15.0 45.0 25.0 20.0
Linoleum	Misc	56A-003	06/12/91	D	35.0
Linoleum	Misc	56A-004	06/12/91		20.0
Linoleum	Misc	56A-005	06/12/91		20.0
Paper Pipe Wrap Insulation	TSI	56B-001	06/12/91	D	35.0
Paper Pipe Wrap Insulation	TSI	56B-001	06/12/91		35.0
Linoleum	Misc	56B-002	06/12/91		LT 0.5
Linoleum	Misc	56B-003	06/12/91		LT 0.5

Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
Paper Pipe Wrap Insulation	TSI	57A-001	06/18/91		40.0
Linoleum	Misc	57A-002	06/18/91		24.0
Linoleum	Misc	57A-002	06/18/91	D	20.0
Transite Panels	Misc	57A-003	06/18/91		60.0
Linoleum	Misc	57A-004	06/18/91		23.0
Linoleum	Misc	57A-005	06/18/91		LT 0.5
Paper Pipe Wrap Insulation	TSI Misc	57B-001	06/14/91		60.0 LT 0.5
Ceiling and Wall Plaster Linoleum	Misc	57B-002 57B-003	06/14/91 06/14/91		LT 0.5
Paper Pipe Wrap Insulation	TSI	57B-003	06/14/91	D	65.0
MAG-Block Insulation	TSI	58A-001	06/14/91		45.0
Paper Pipe Wrap Insulation	TSI	58A-002	06/14/91		LT 0.5
Paper Pipe Wrap Insulation	TSI	58A-002	06/14/91	D	LT 0.5
12x12 Floor Tiles	Misc	58A-003	06/14/91		LT 0.5
MAG-Block Insulation	TSI	58B-001	06/19/91		35.0
MAG-Block Insulation	TSI	58B-001	06/19/91	D	40.0
12x12 Floor Tiles	Misc	58B-002	06/19/91		LT 0.5
Linoleum	Misc	58B-003	06/19/91		24.0
Transite Panels Linoleum	Misc Misc	58B-004 59-001	06/19/91 06/13/91		70.0 25.0
Linoleum	Misc	59-001	06/13/91	D	28.0
Adhesive Materials	Misc	59-002	06/13/91	D	LT 0.5
Linoleum	Misc	59-003	06/13/91		LT 0.5
Joint Compound	TSI	59-004	06/13/91		LT 0.5
MAG-Block Insulation	TSI	60A-001	06/19/91		20.0
MAG-Block Insulation	TSI	60A-001	06/19/91	D	20.0
Air Cell Insulation	TSI	60B-001	06/19/91		30.0
Linoleum	Misc	60B-002	06/19/91		LT 0.5
Transite Panels	Misc	60B-003	06/19/91	-	65.0
Transite Panels	Misc	60B-003	06/19/91	D	70.0
Tar Paper 9x9 Floor Tiles	Misc Misc	60B-004 60B-005	06/19/91 06/19/91		LT 0.5 LT 0.5
Linoleum	Misc	60B-005	06/19/91		LT 0.5
Transite Panels	Misc	61-001	06/20/91		65.0
Transite Panels	Misc	61-001	06/20/91	D	70.0
Ceiling Paper	Misc	62-001	06/13/91		LT 0.5
Ceiling Paper	Misc	62-001	06/13/91	D	LT 0.5
Adhesive Materials	Misc	62-002	06/13/91		LT 0.5
Sheetrock	Misc	62-003	06/13/91		LT 0.5
Linoleum	Misc	62-004	06/13/91		LT 0.5
Ceiling Paper	Misc	63-001	06/13/91		LT 0.5
9x9 Floor Tiles Linoleum	Misc	63-002	06/13/91		7.0
Linoleum	Misc Misc	63-003 63-004	06/13/91 06/13/91		LT 0.5 LT 0.5
Linoleum	Misc	63-004	06/13/91		LT 0.5
9x9 Floor Tiles	Misc	63-002	06/13/91	D	7.0
Joint Compound	TSI	64A-001	06/14/91	2	LT 0.5
Air Cell Insulation	TSI	64A-002	06/14/91		75.0
Air Cell Insulation	TSI	64A-002	06/14/91	D	70.0
Paper Pipe Wrap Insulation	TSI	64A-003	06/14/91		LT 0.5
9x9 Floor Tiles	Misc	64A-004	06/14/91		LT 0.5
Air Cell Insulation	TSI	64B-001	06/13/91	-	30.0
Air Cell Insulation	TSI	64B-001	06/13/91	D	35.0

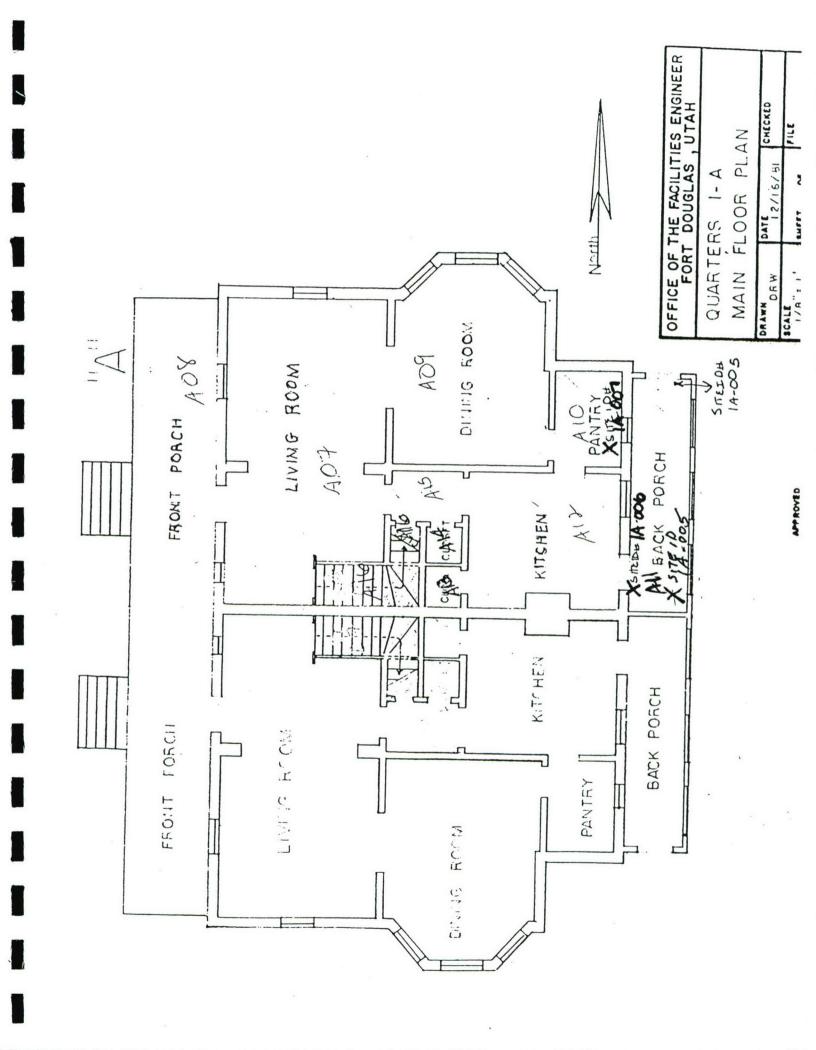
Material Description	Material Class	Sample ID	Sample Date	QC Type	Value %
Joint Compound Wire Wrap 12x12 Floor Tiles Air Cell Insulation Ceiling and Wall Plaster Ceiling and Wall Plaster Linoleum Joint Compound	TSI Misc Misc TSI Misc Misc Misc TSI	64B-002 64B-003 64B-004 65A-001 65A-003 65A-002 65B-001	06/13/91 06/13/91 06/13/91 06/14/91 06/14/91 06/14/91 06/14/91	D	30.0 LT 0.5 LT 0.5 45.0 LT 0.5 LT 0.5 20.0 40.0
Joint Compound Air Cell Insulation Linoleum MAG-Block Insulation 2x4 Ceiling Panels 2x4 Ceiling Panels	TSI TSI Misc TSI Misc Misc	65B-001 65B-002 65B-003 66A-001 66A-002 64A-002	06/22/91 06/22/91 06/22/91 06/14/91 06/14/91 06/14/91		40.0 65.0 LT 0.5 35 LT 0.5 LT 0.5
MAG-Block Insulation MAG-Block Insulation Sheetrock Linoleum Linoleum Linoleum Transite Panels	TSI TSI Misc Misc Misc Misc Misc	66B-001 66B-001 66B-002 66B-003 66B-004 66B-005	06/10/91 06/10/91 06/10/91 06/10/91 06/10/91 06/10/91		25.0 30.0 LT 0.5 LT 0.5 LT 0.5 LT 0.5
Transite Panels Tar Paper Sheetrock Sheetrock Roof Shingles Roof Shingles Tar Paper	Misc Misc Misc Misc Misc Misc Misc	69-001 69-002 350-001 350-001 350-002 350-003 350-004	06/15/91 06/15/91 06/15/91 06/15/91 06/15/91 06/15/91	D D	55.0 LT 0.5 LT 0.5 LT 0.5 LT 0.5 LT 0.5 LT 0.5
Concrete Expansion/Joint Concrete Expansion/Joint	Misc Misc	351-001 351-001	06/15/91 06/15/91	D	LT 0.5 LT 0.5

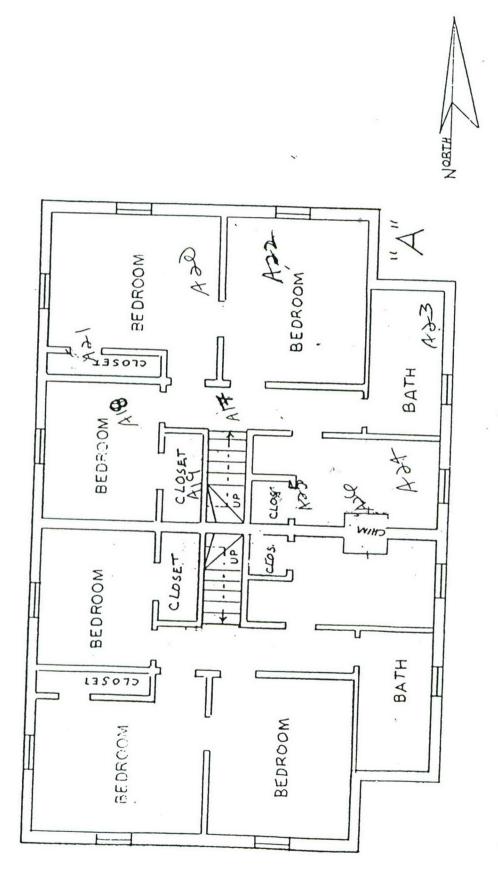
## Appendix B

Locations of Asbestos Samples at Fort Douglas, Utah, Excessed Area



OFFICE OF THE FACILITIES ENGINEER
FORT DOUGLAS, UTAH
OUTARTERS 7-A
BASEMENT FLOOR PLAN
ONAWBRW DATE/7/82 CHECKED
SCALE





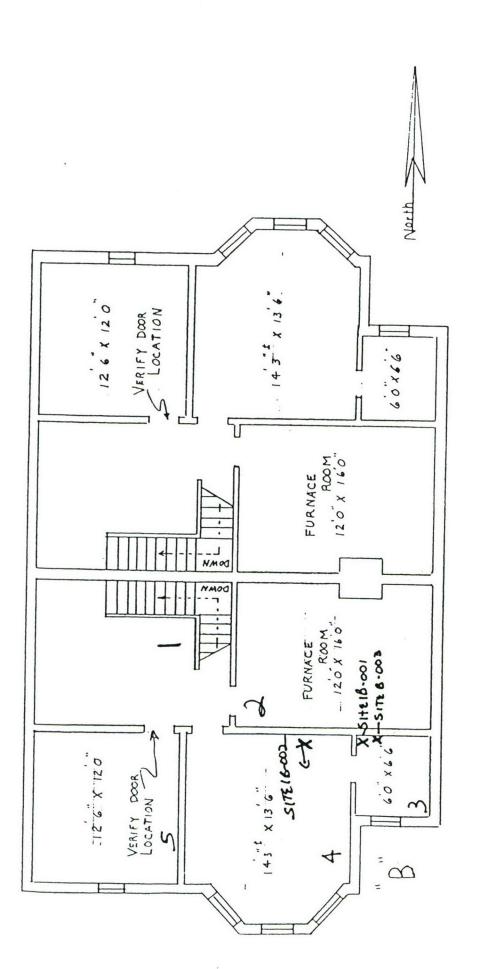
OFFICE OF THE FACILITIES ENGINEER FORT BOUGLAS, UTAH

QUARTERS 1-A

UPSTAIRS FLOOR PLAN

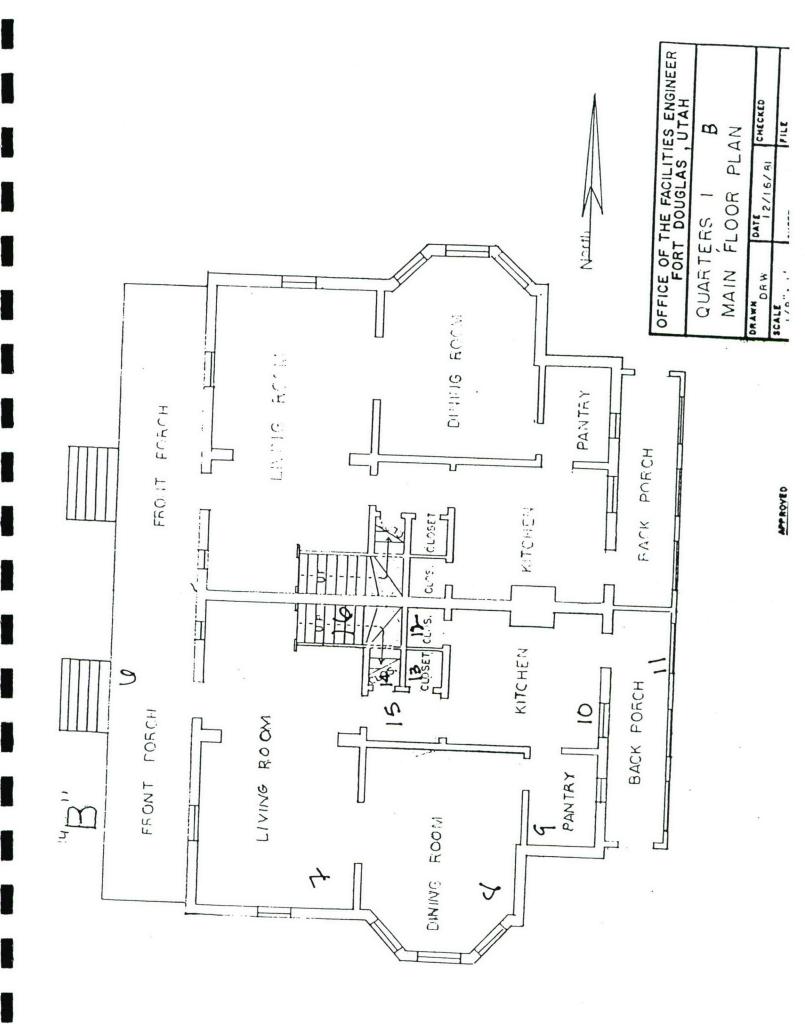
ONAWN

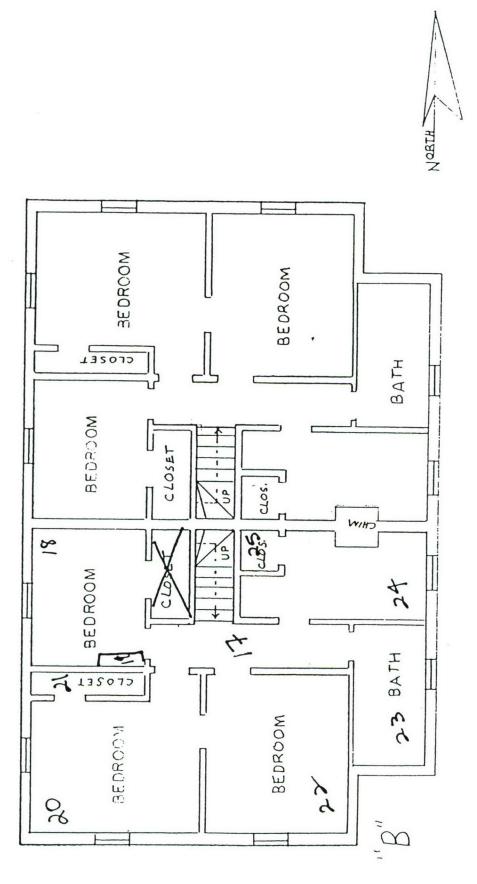
SCALE. ...



OFFICE OF THE FACILITIES ENGINEER FORT DOUGLAS, UTAH	S I B NT FLOOR PLAN	17/92 CHECKED	FILE
FORT DOUGLA	QUARTERS BASEMENT	DATE/7/3	SCALE

7B



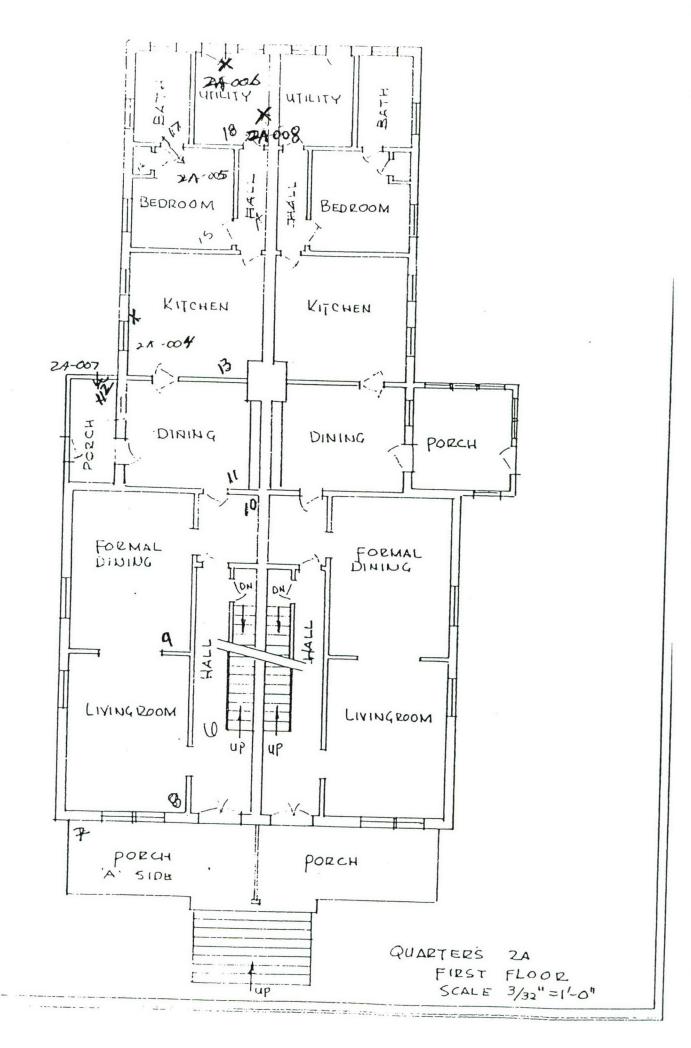


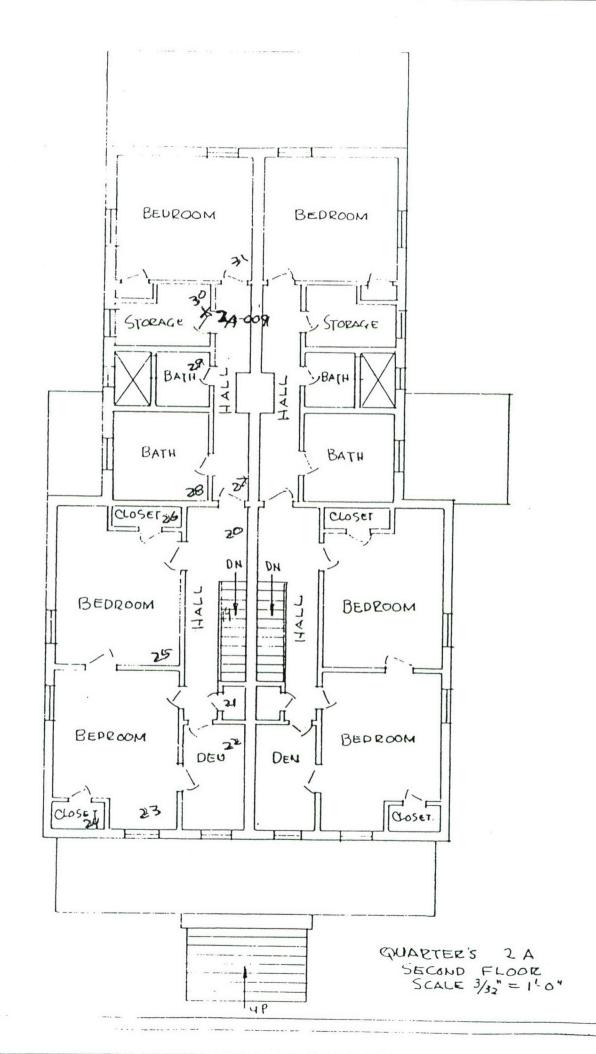
OFFICE OF THE FACILITIES ENGINEER
FORT DOUGLAS, UTAH
QUARTERS | 'B
UPSTAIRS FLOOR PLAN
ONAWREN
SCALE
SCALE
SCALE
SCALE

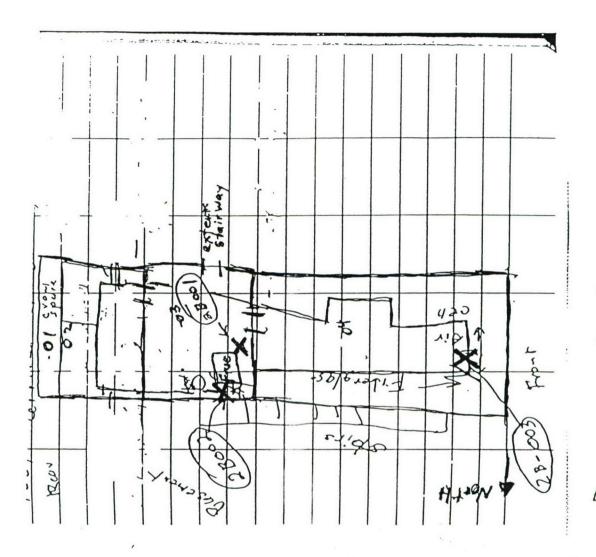
1PPROVED

1,5%

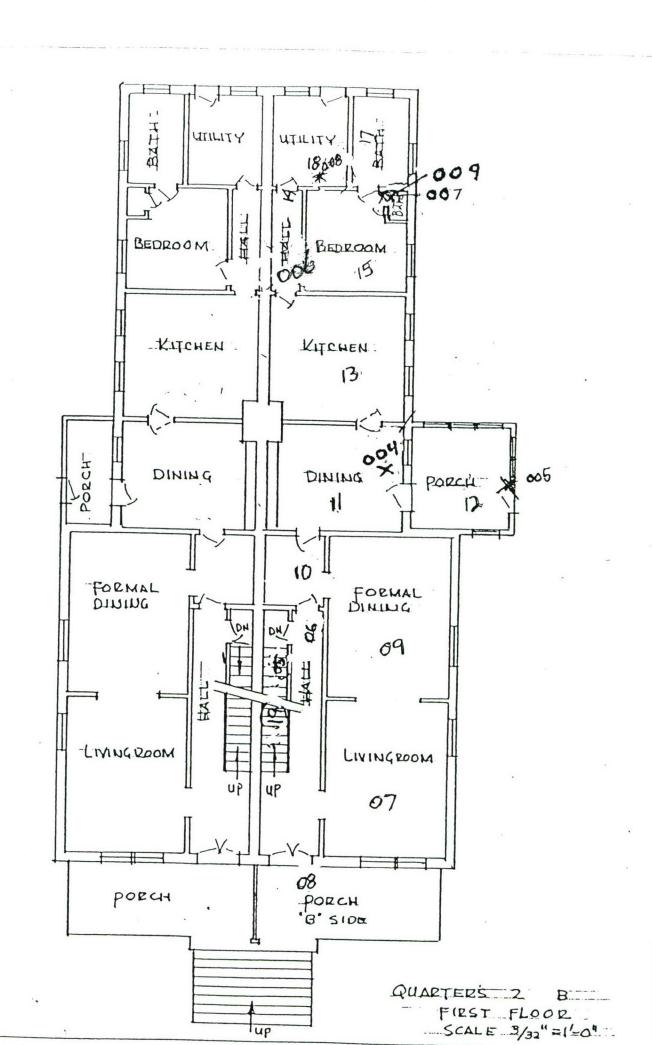
Basement Ploor Wash

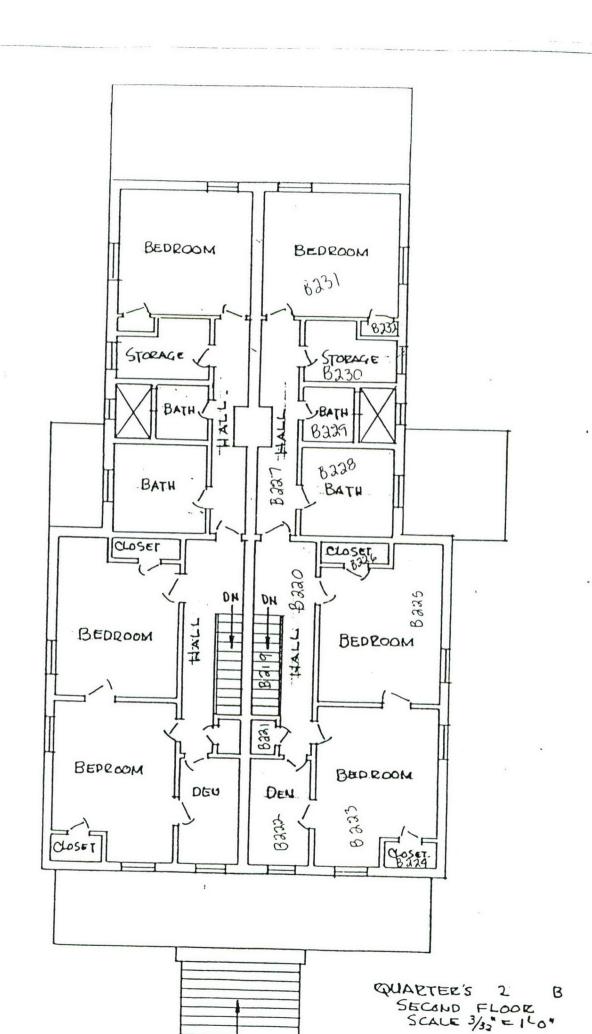


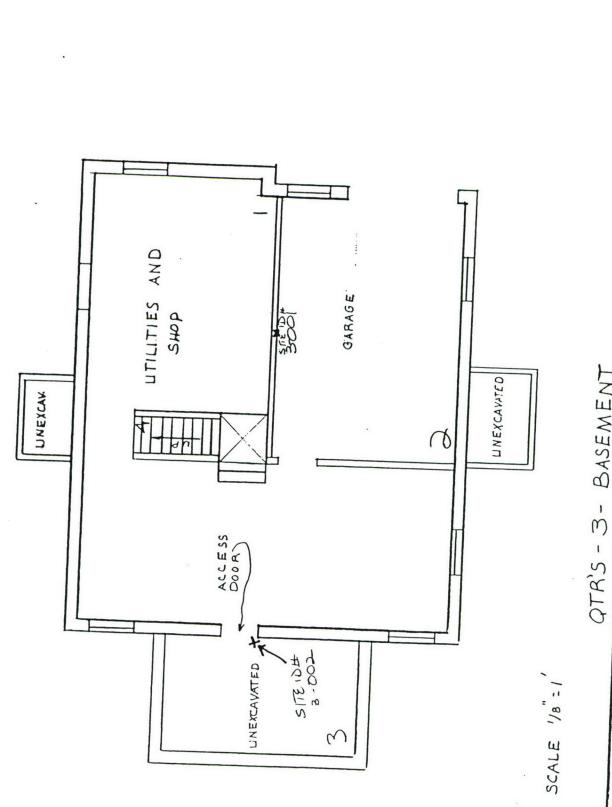




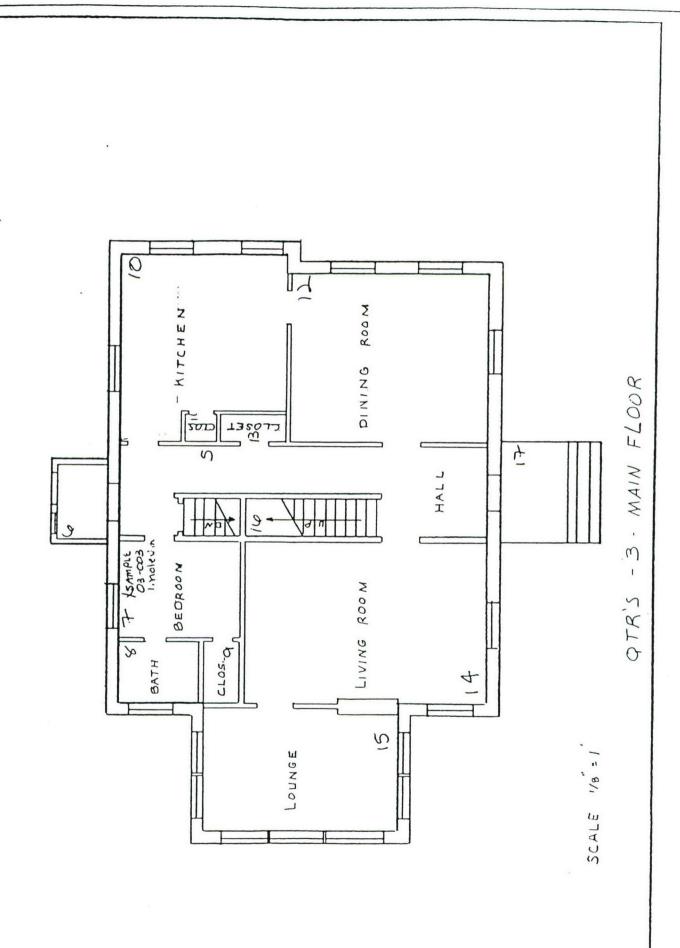
Building 2 B Basement





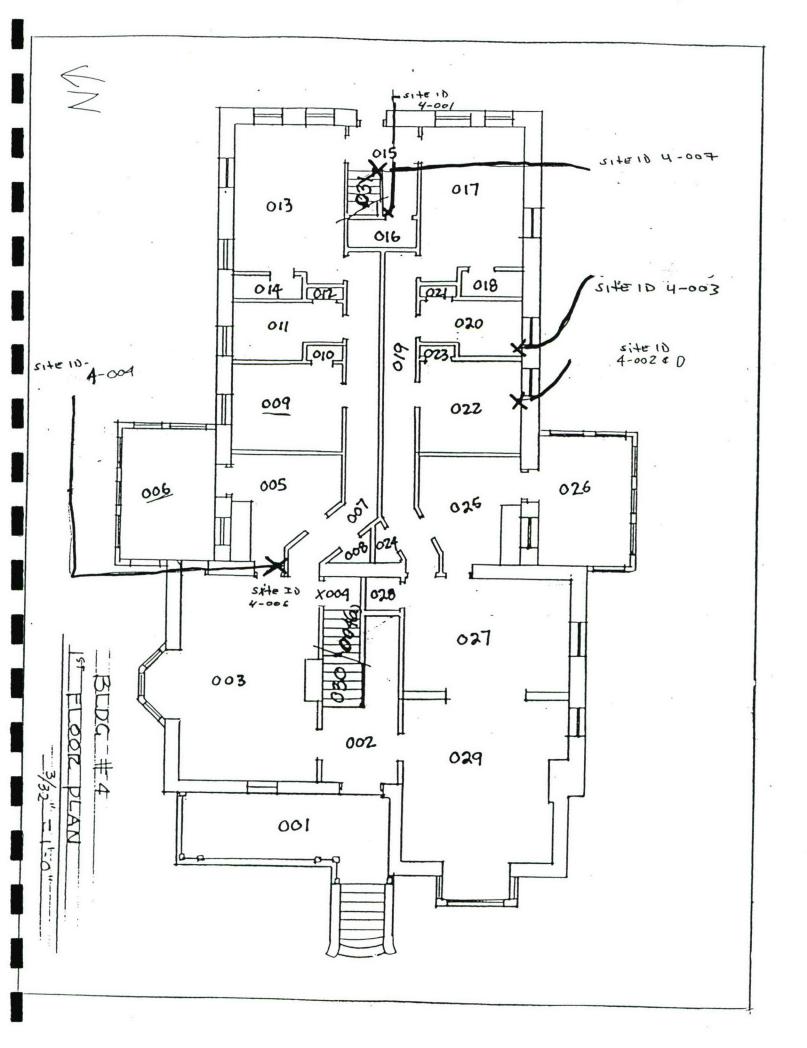


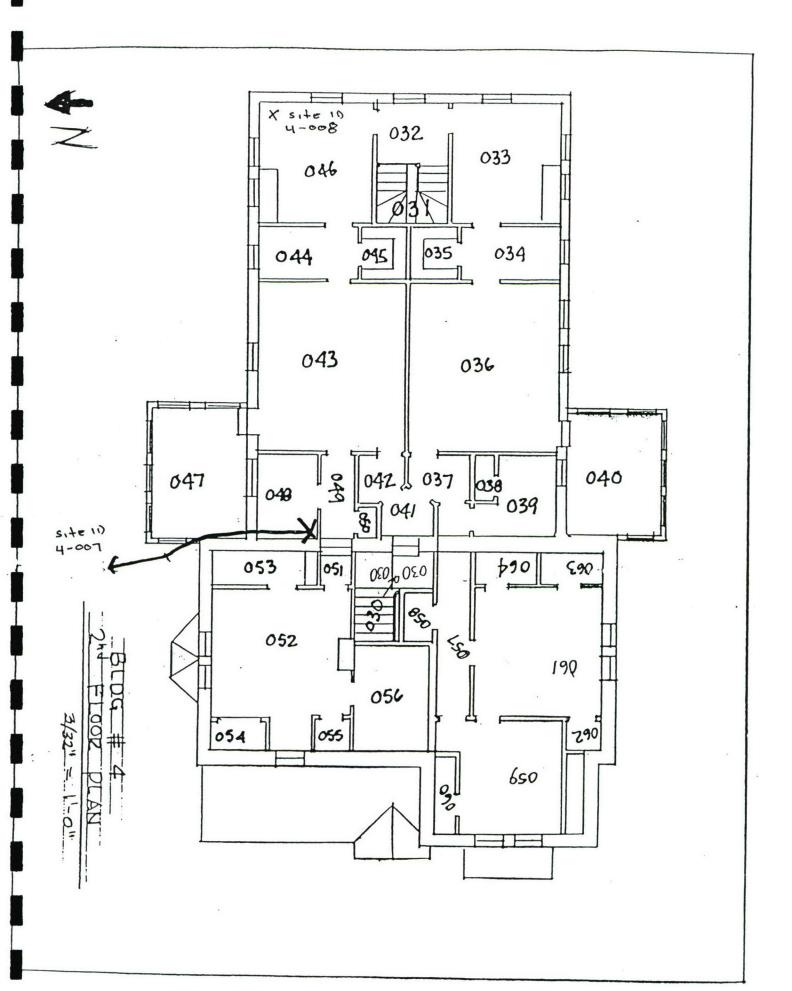
BASEMENT

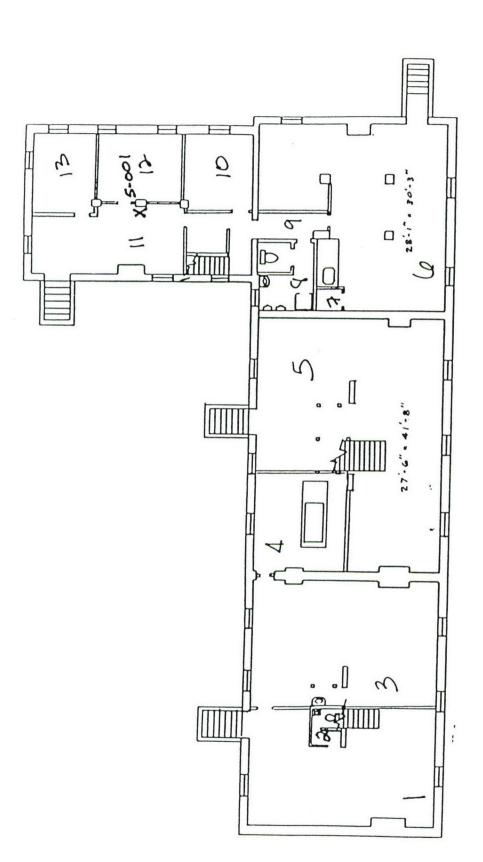


accup 10220 access room ourcely Wein though plastar (K&W) from or knowed pip - remainder onle all concrete floor cranlegaput remining Window 40% 1 201 Q 1-008 (9) Crawlyna General 198 36 65

at base of 8 are (t) to notes on pg, 001-087 (2)400 an flor craw Space. block pipe insulatur at bosh or poper of stair aug of 8 from floor 3' from 001-088 debris ~ 150' total # 4-008 - 500 200 B Boarne 8 Sor to Semple 023/21 space -200 17:13



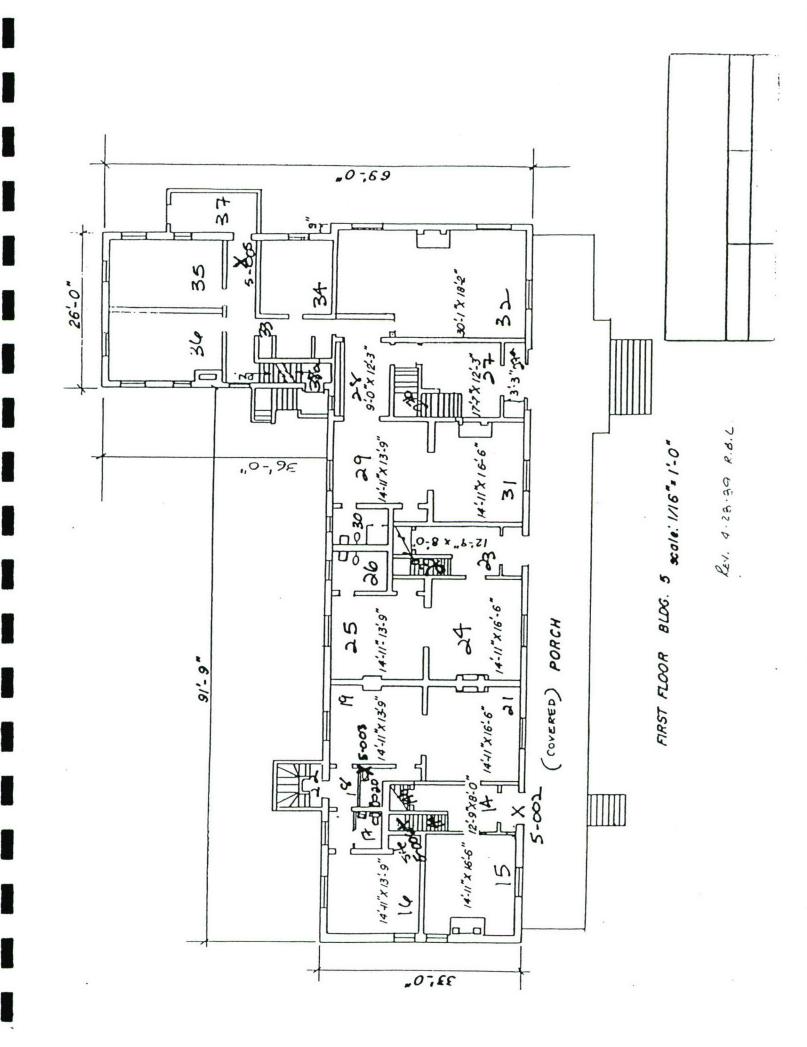


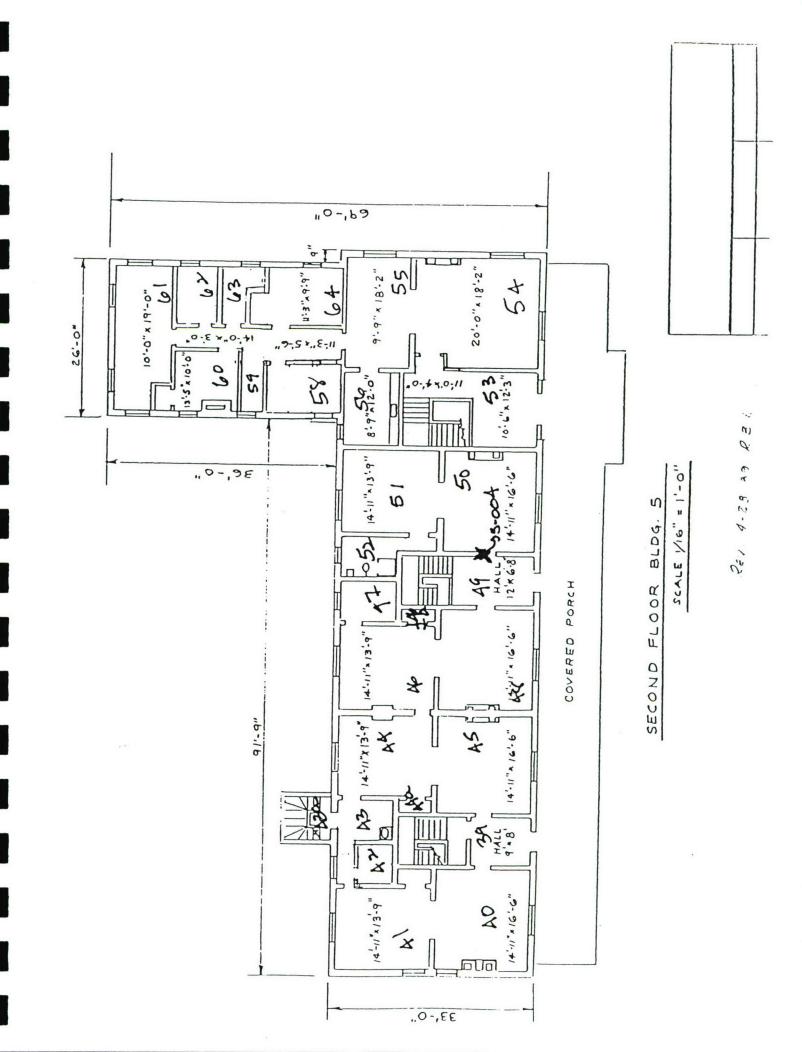


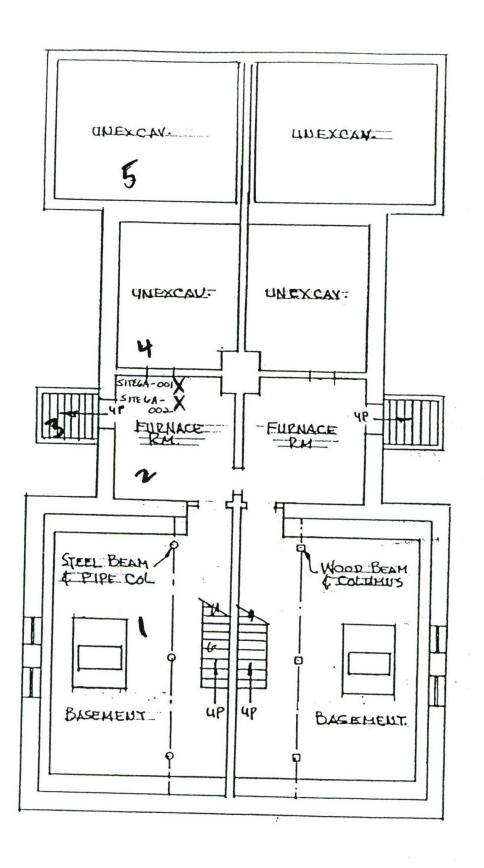
BASEMENT BLDG. 5 SCALE 1/2"1'

UTAH		CHECKED	
OFFICE OF THE FACILITIES ENGINEER FORT DOUGLAS, UTAH	9140		
OFFICE O	NA MA	SCALE	
		101	

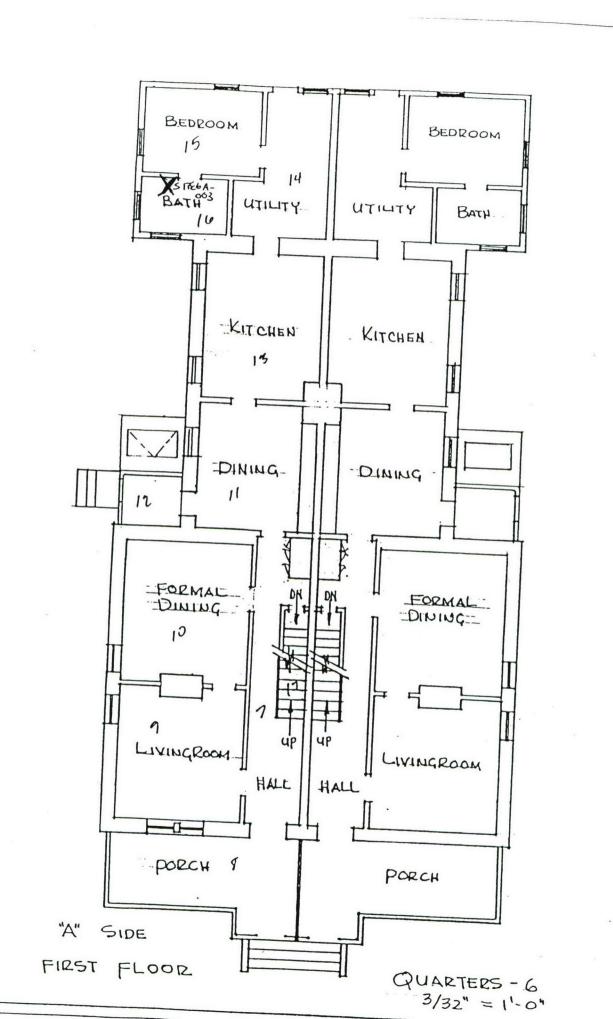
REV. 4-28-89 R.B.L.

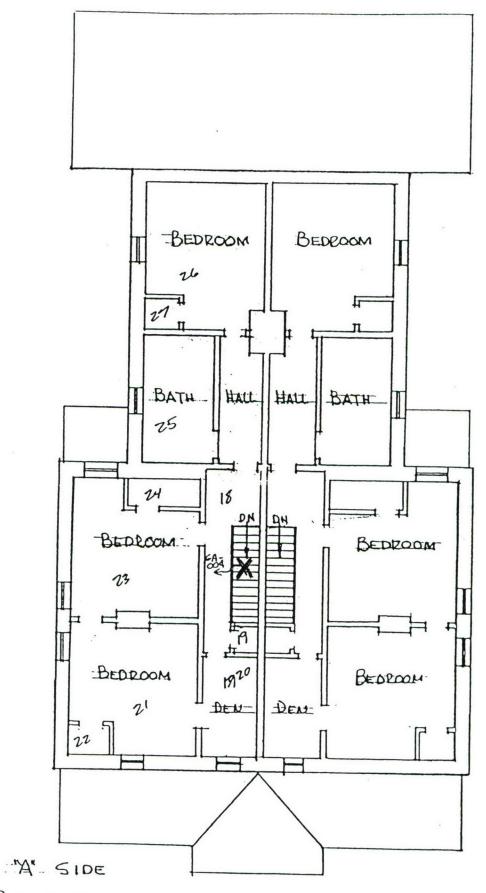






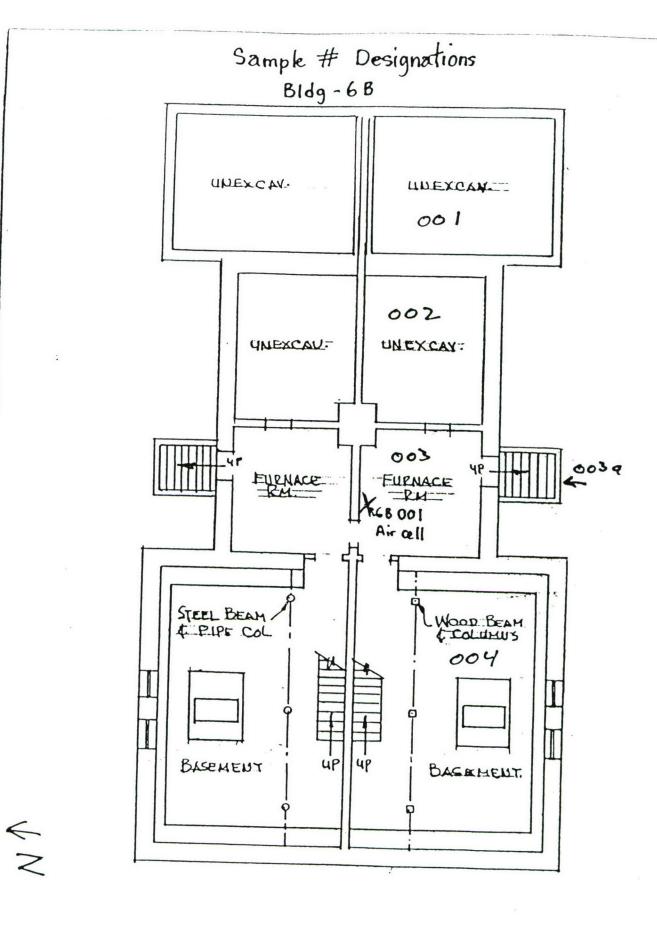
-A" SIDE BASEMENT, FLOOR





SECOND FLOOR

QUARTERS-6



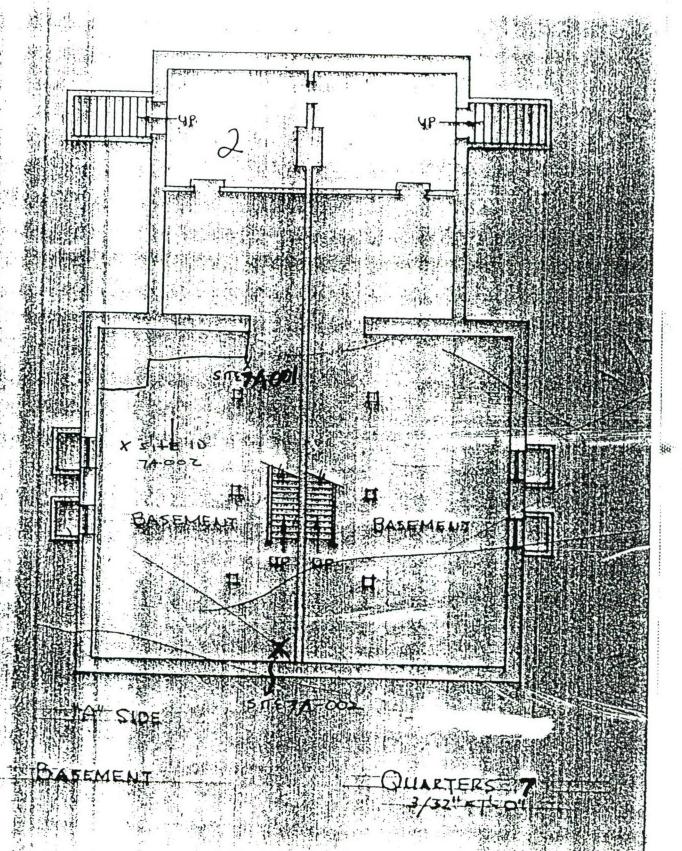
B" SIDE

-3/32" =1'-0"

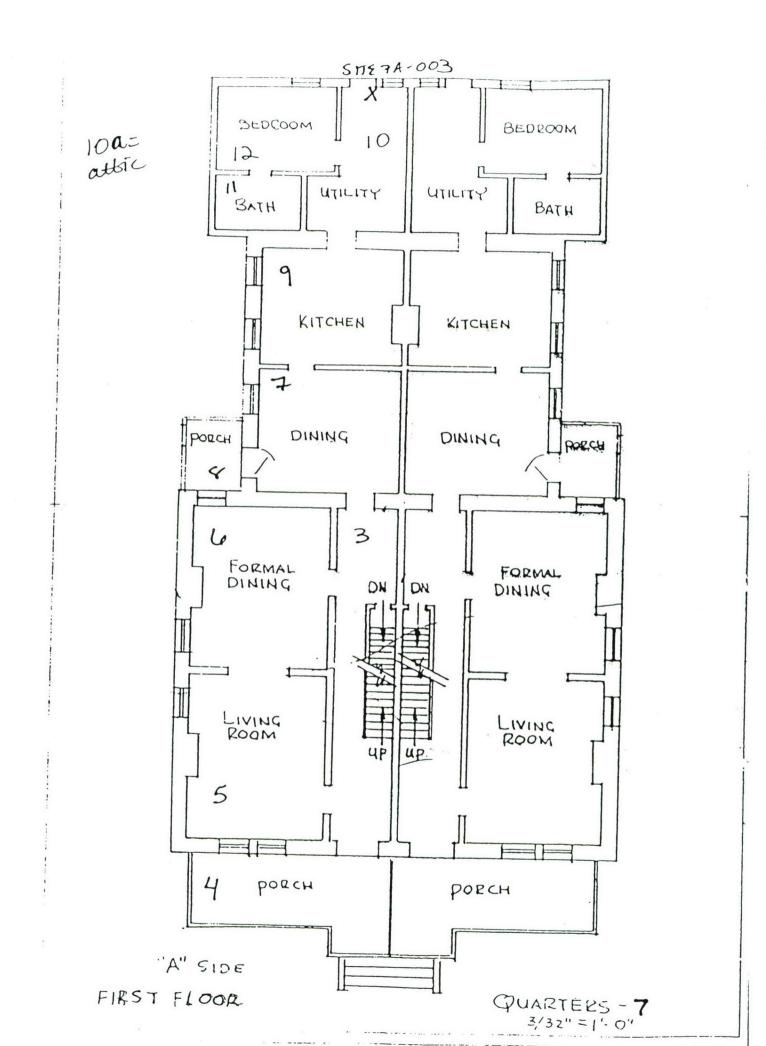
BASEHOUT. FLOOR

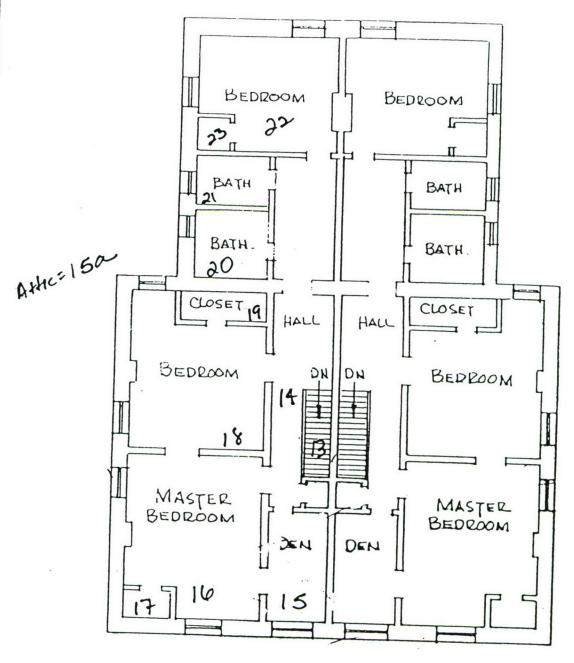
Sample # Designations Bldg 6-B X site 10 X site 10 BEDROOM BEDROOM. 68-004 013 014 BATH итилу BACH-00 UTILITY 015 13a attic 012 KITCHEN s pace KITCHEN 010 -DINING. DINING 68003 6B002 wall plaster 011 Sheetrack I' from floor at & Wall, Soon FORMAL edge. FORMAL DULLING DINING 009 008 LIVINGROOM. LIVINGROOM N HALL HALL OO 6 PORCH PORCH B" SIDE FIRST FLOOR QUARTERS - 6 3/32" = 11-04

Sample # Designations Bldg. 6-B BEDROOM BEDROOM 026 X-31+010 68-00] BATH. HALL HALL BATH 025 024 023 BEDLOOM. BEDROOM 020 1 BEDROOM 019 BEDROOM DEU-DEN-Pozit "B" SIDE SECOND FLOOR QUARTERS-6 3/524 = 1-0"



FA



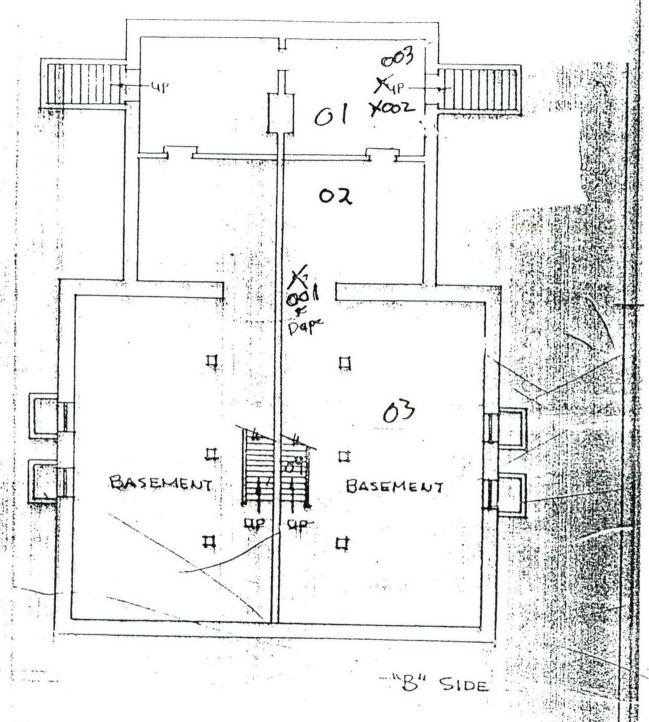


"A" SIDE

SECOND FLOOR

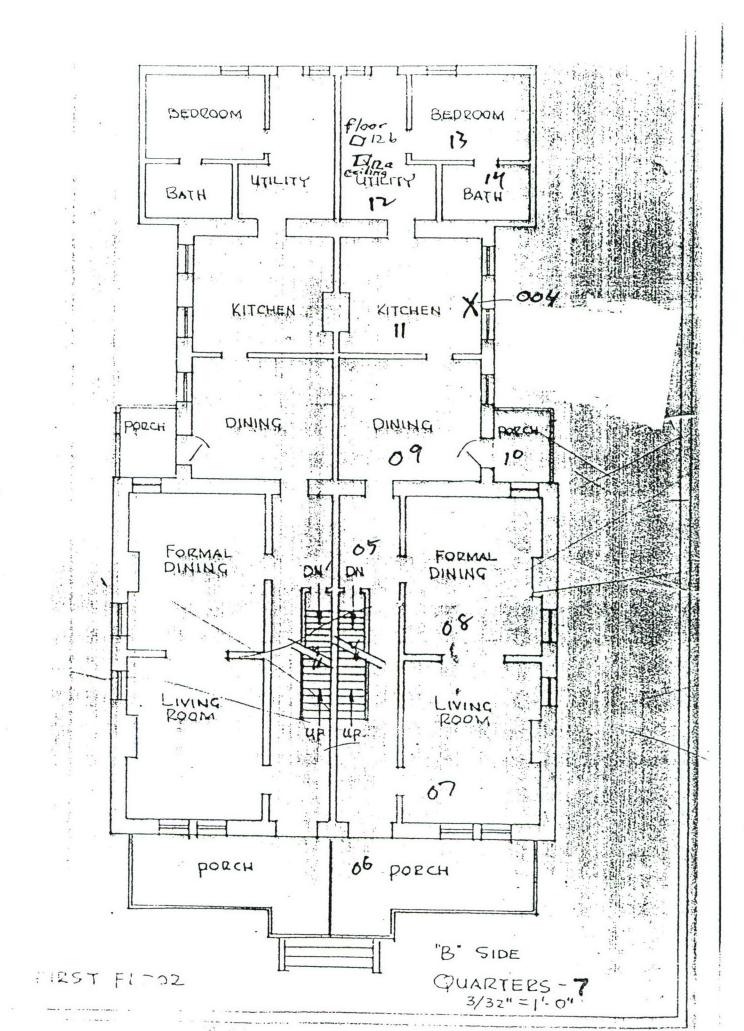
QUARTERS 7 3/32"=1'-0"

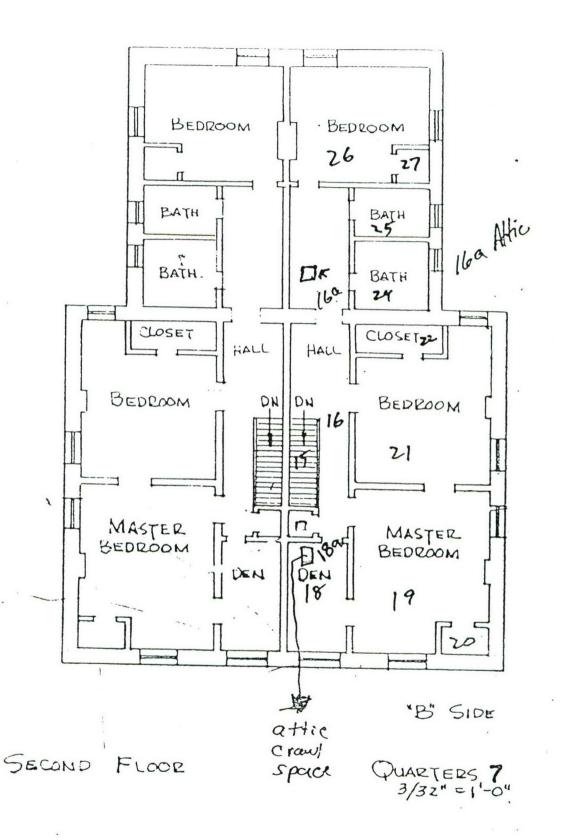
## Sample location map

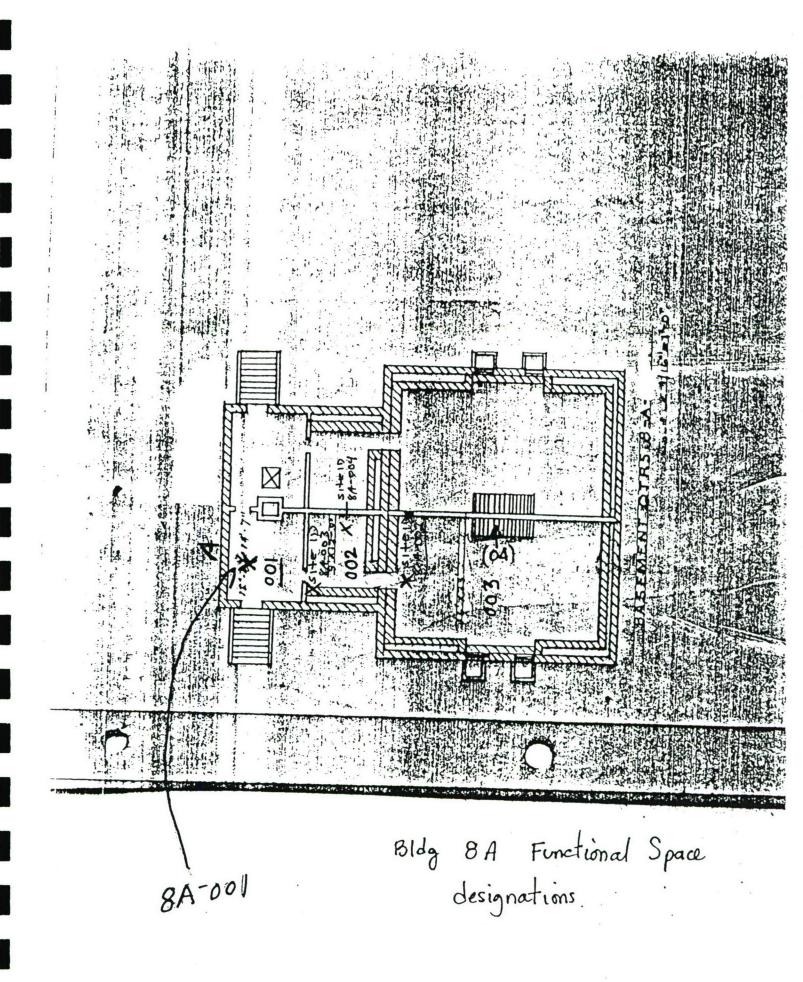


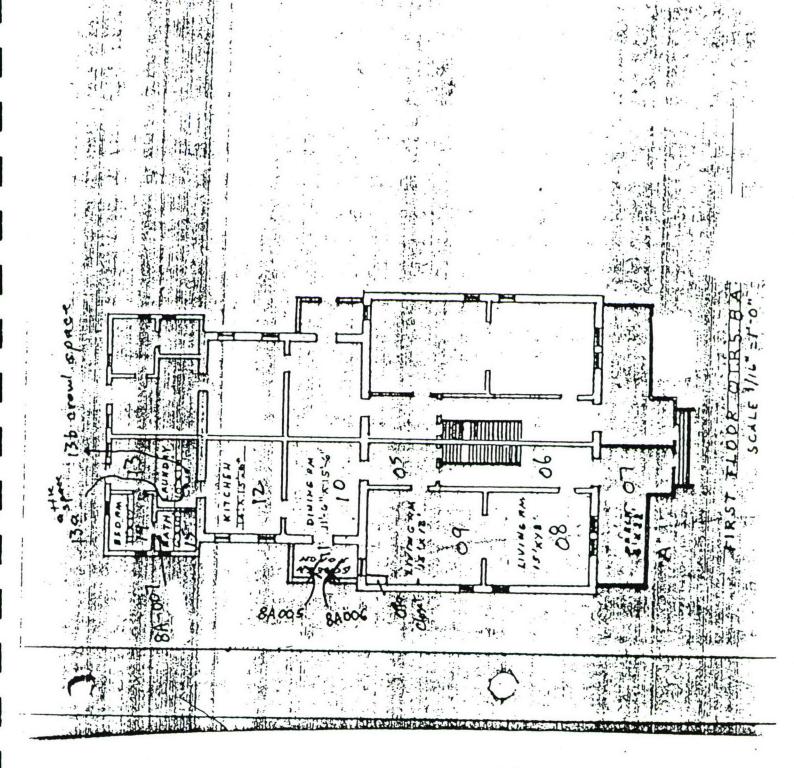
BASEMENT

QUARTERS 7

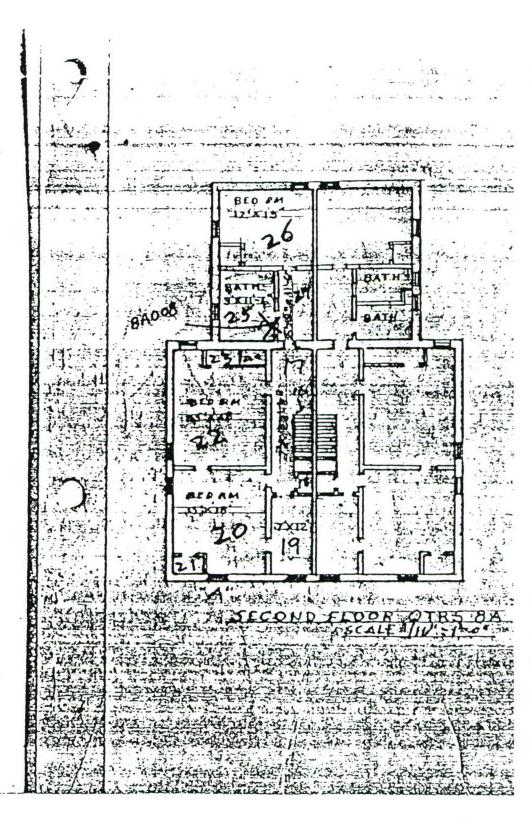




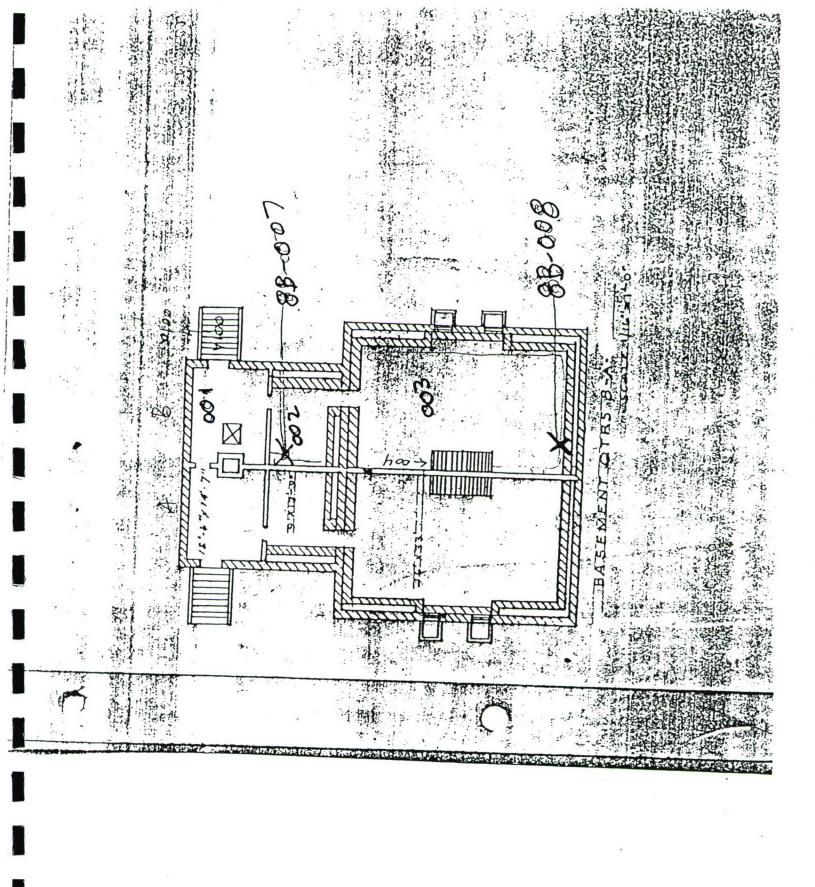


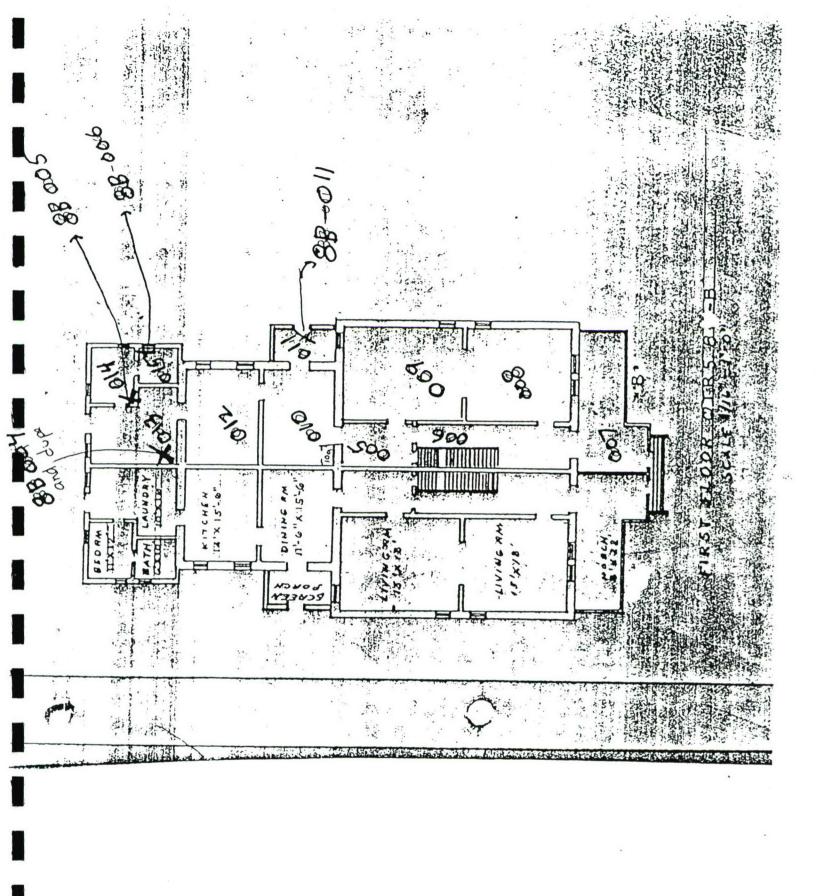


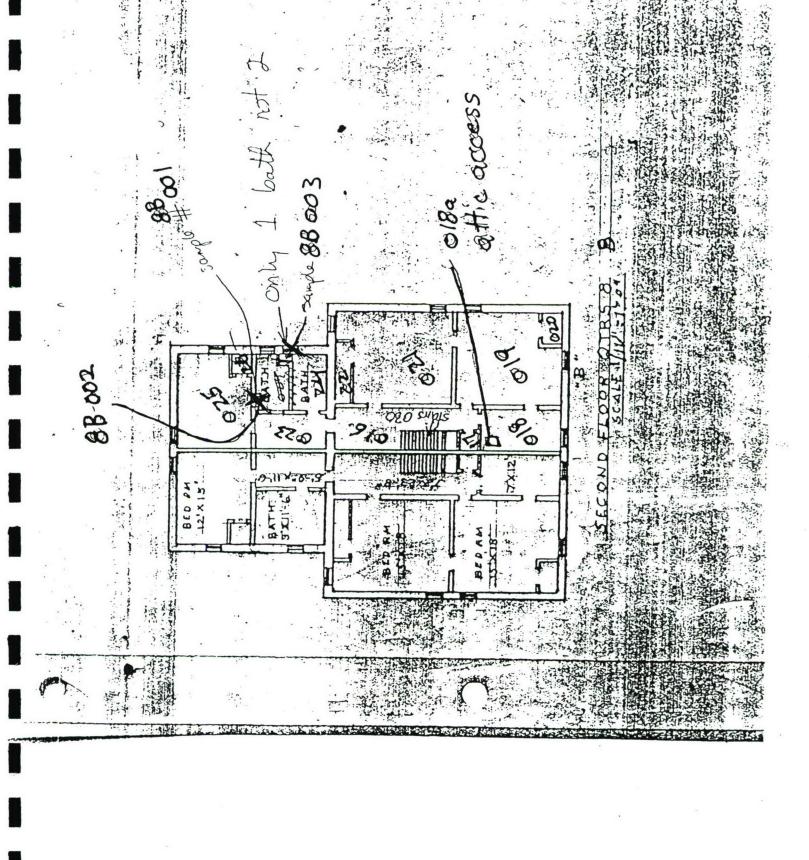
Bldg & A sample locations

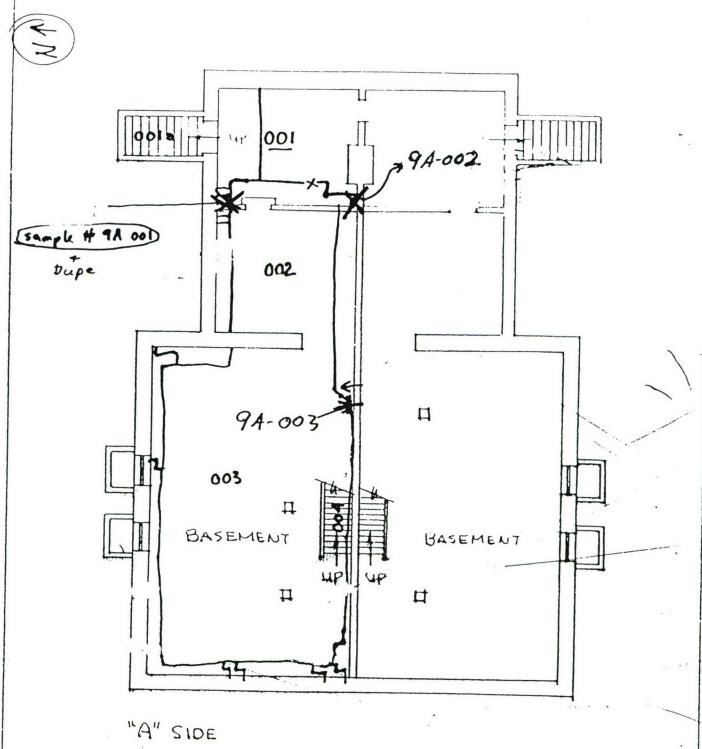


Bldg BA SAMPLE LOCATIONS







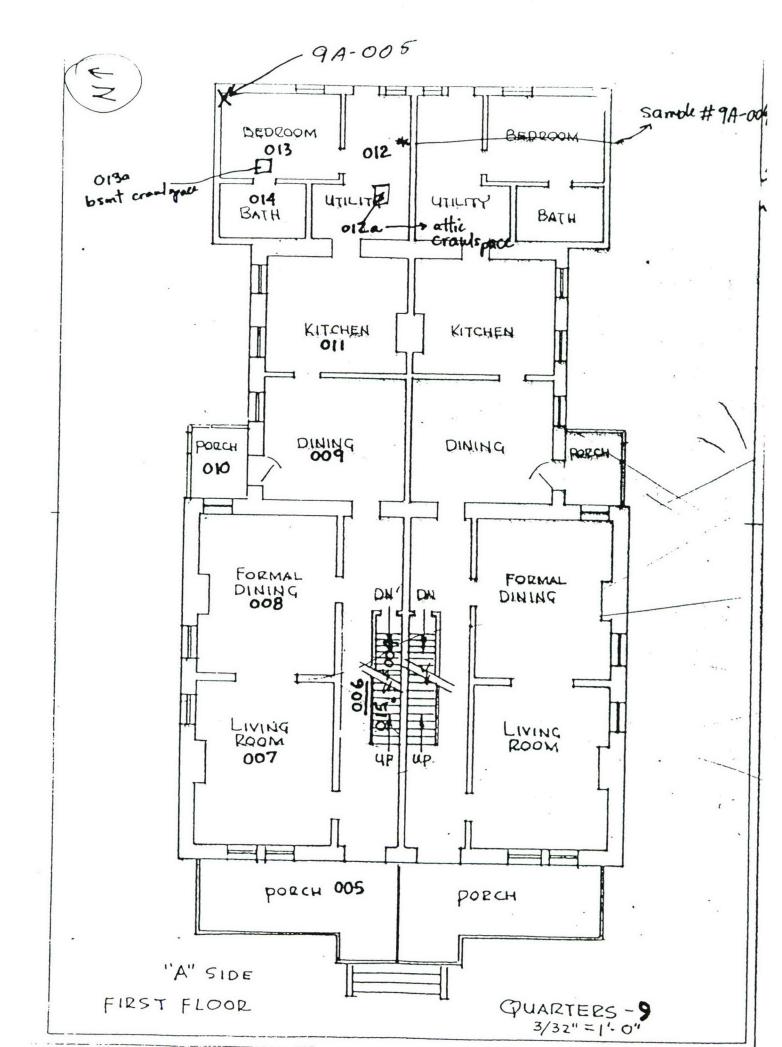


.

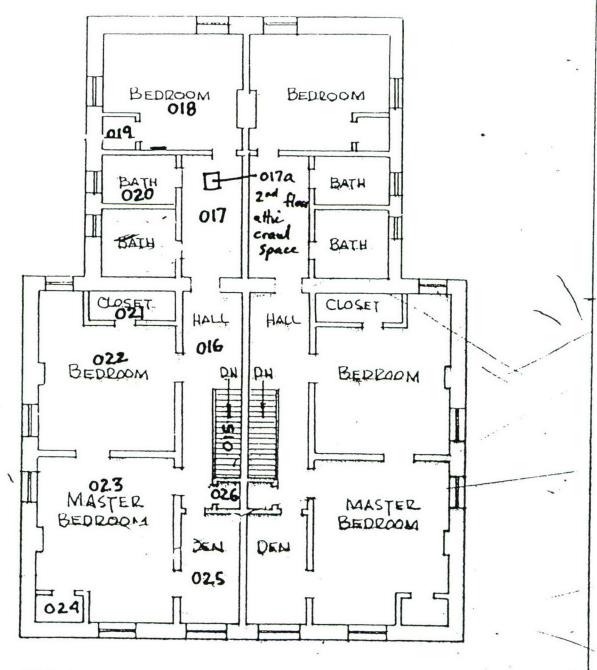
BASEMENT

QUARTERS 9 3/32" = 1'-0"

Functional Spaces



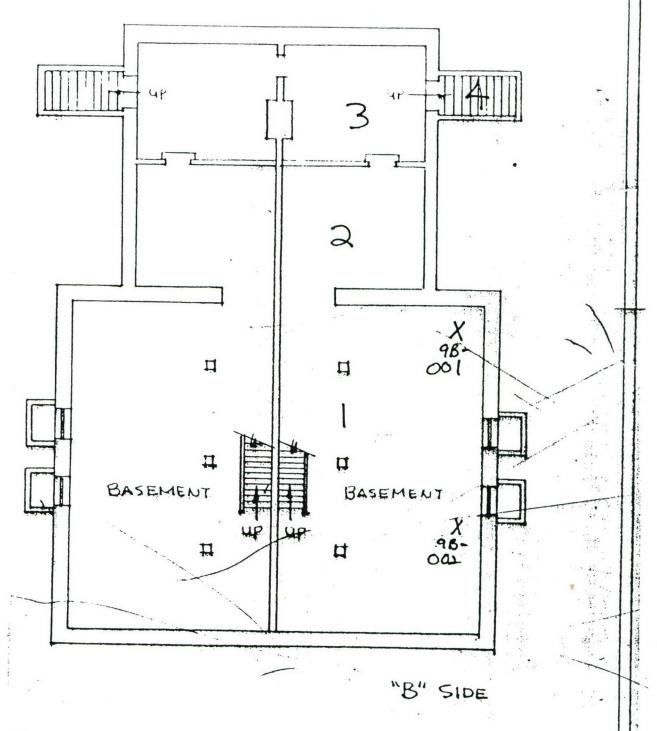




"A" SIDE

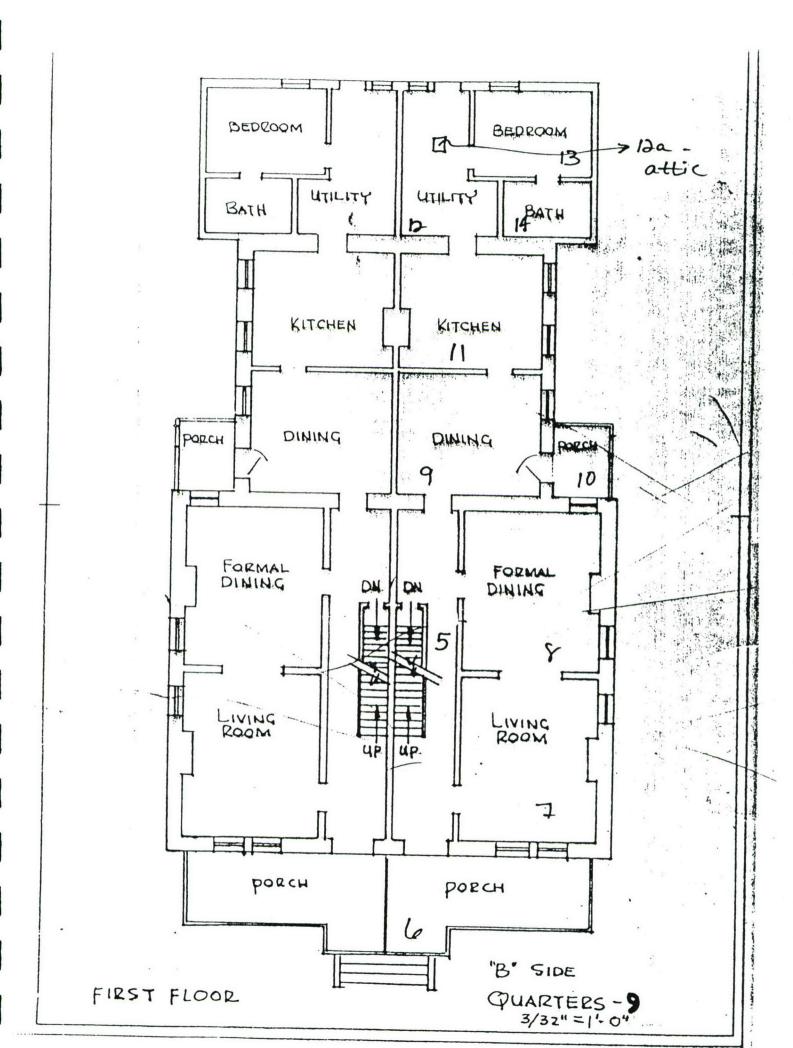
SECOND FLOOR

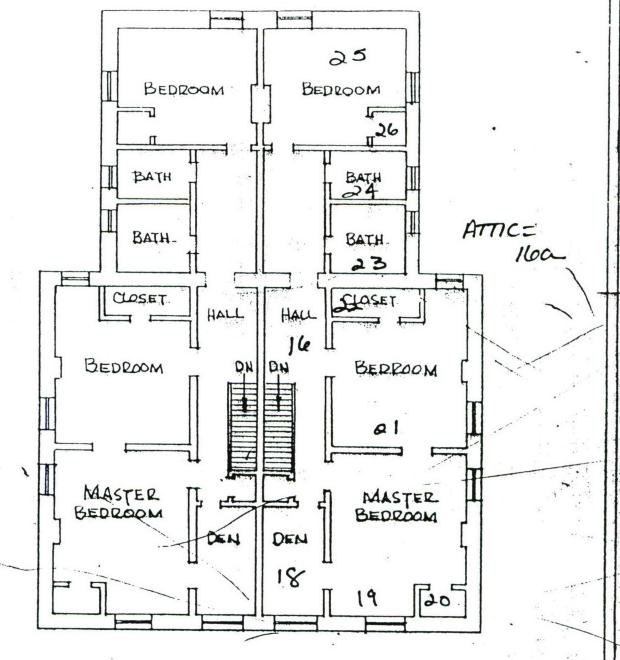
QUARTERS 9 3/32"=1-0"



BASEMENT

QUARTERS 9

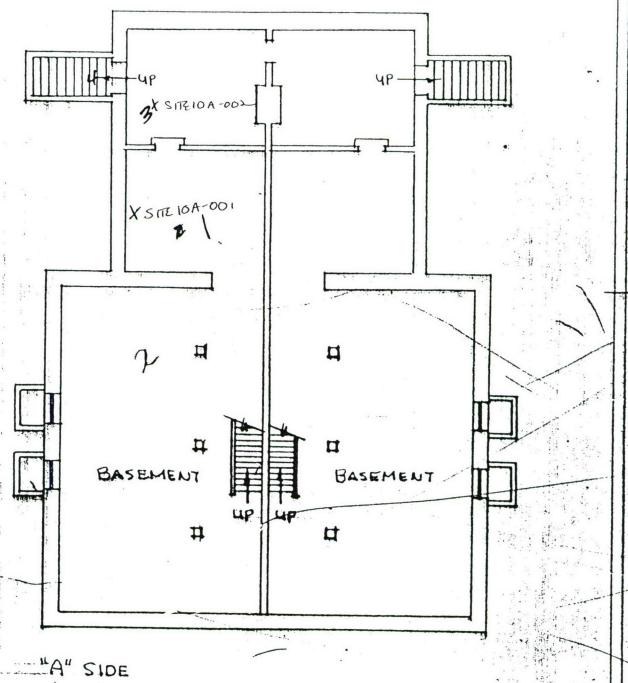




"B" SIDE

SECOND FLOOR

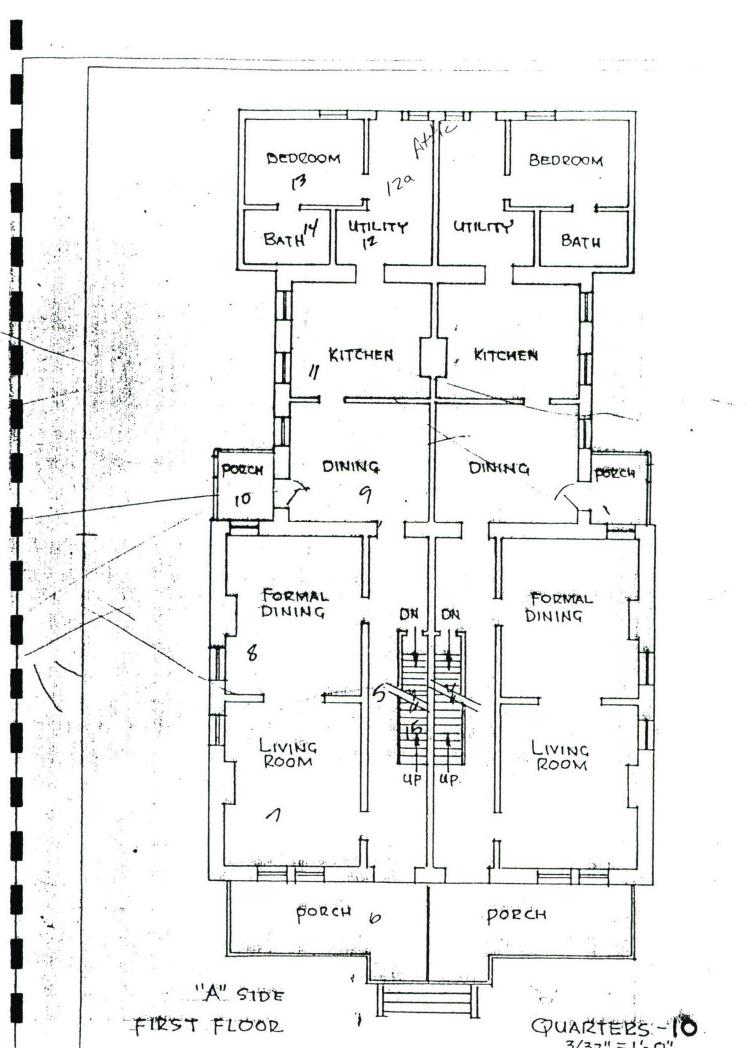
QUARTERS 9 3/32" =1'-0"

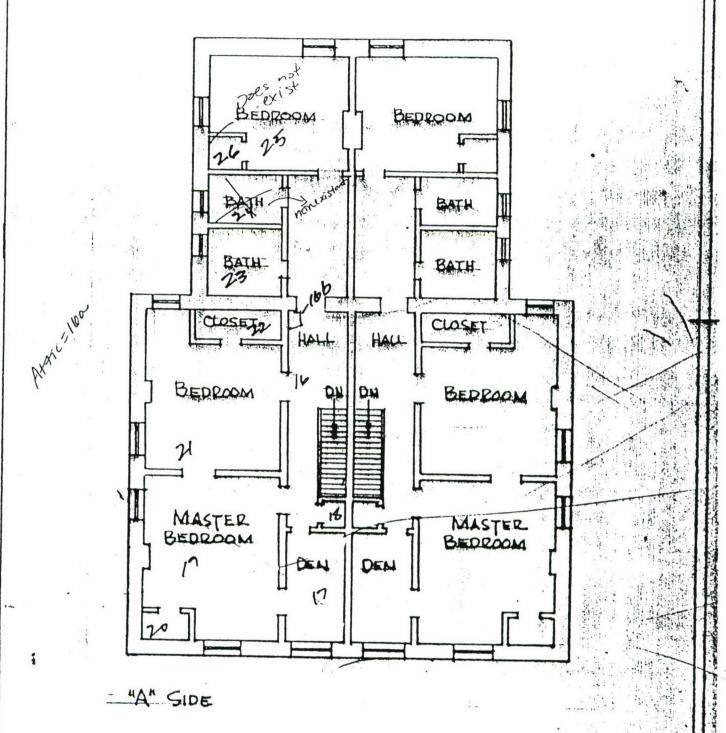


BASEMENT

QUARTERS 10

10A

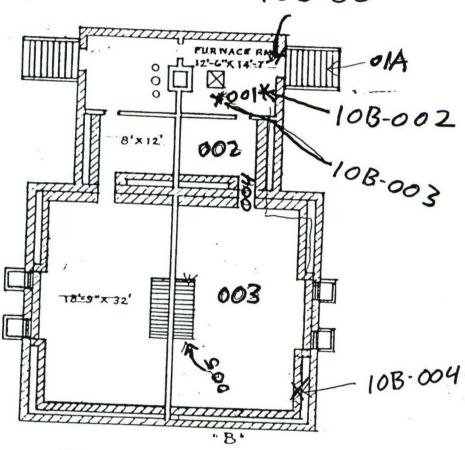




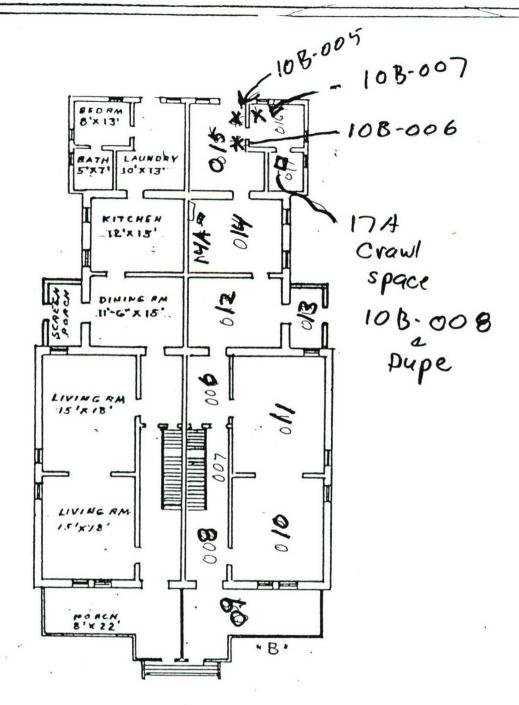
SECOND FLOOR

QUARTERS 10

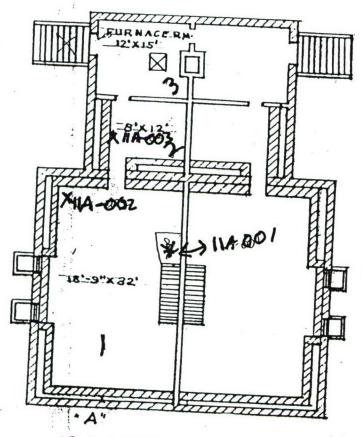
108-001



BASEMENT OTRS. TO B

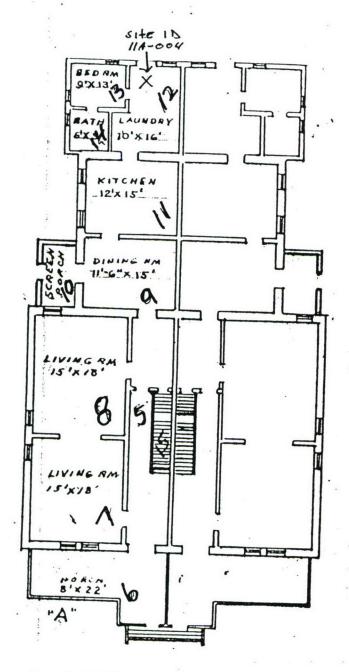


SCALE 1/16" = 1'-0"



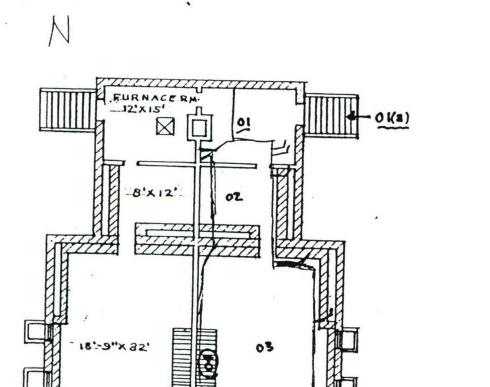
BASEMENT OTRS. ITA-

11 A



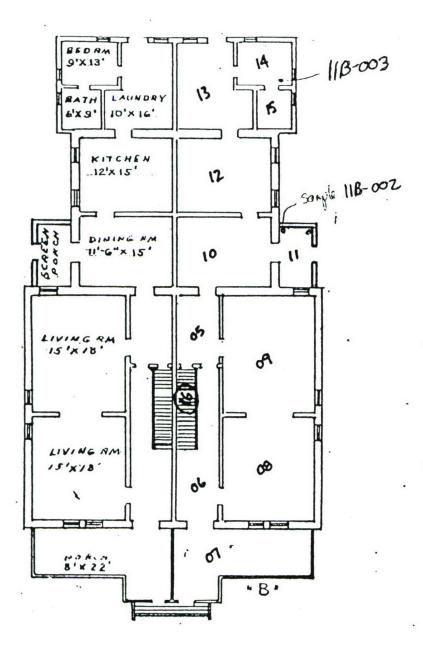
FIRST FLOOR OTRS, ILA.

SCALE 1/16" = 1'-0"



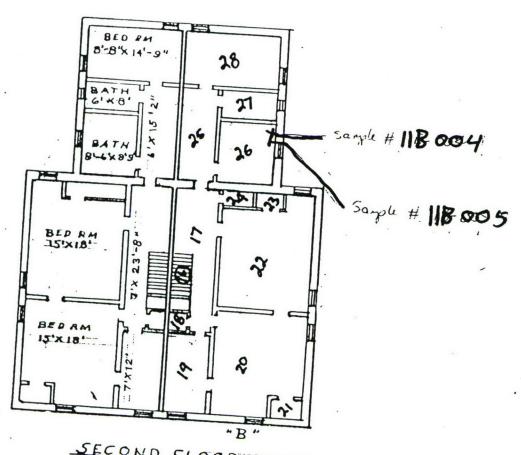
BASEMENT OTRS. II B

Sample 11B-001



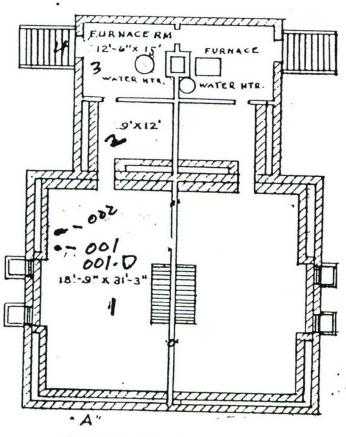
FIRST FLOOR QTRS, IL -B



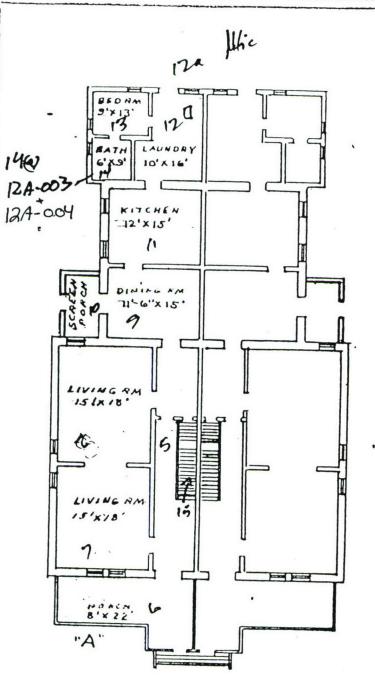


SECOND FLOOR OTRS IIA-B

## Sample location Marp

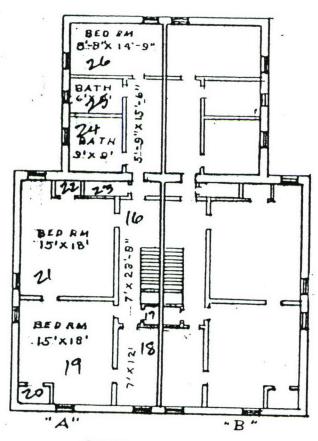


BASEMENT QTRS, 12 A. SCALE VILL -1-0".

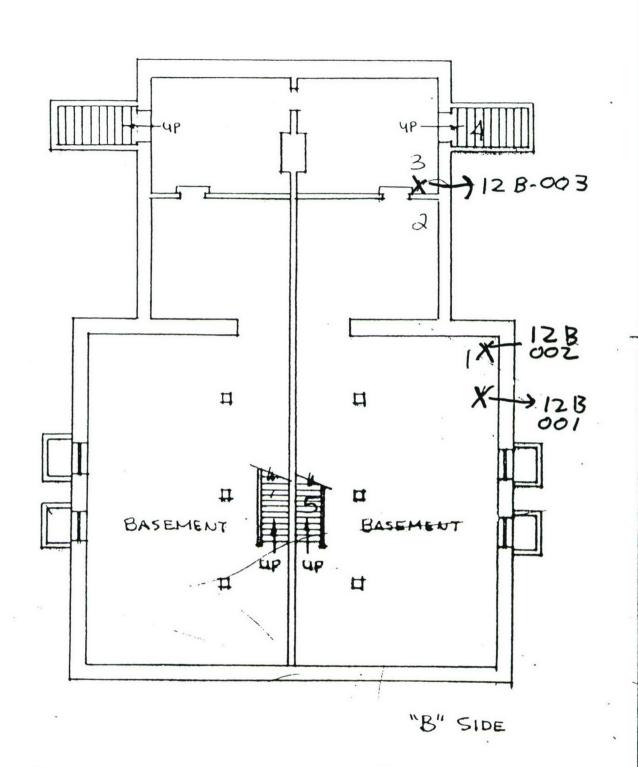


FIRST FLOOR QTRS 12-A

16a Affic

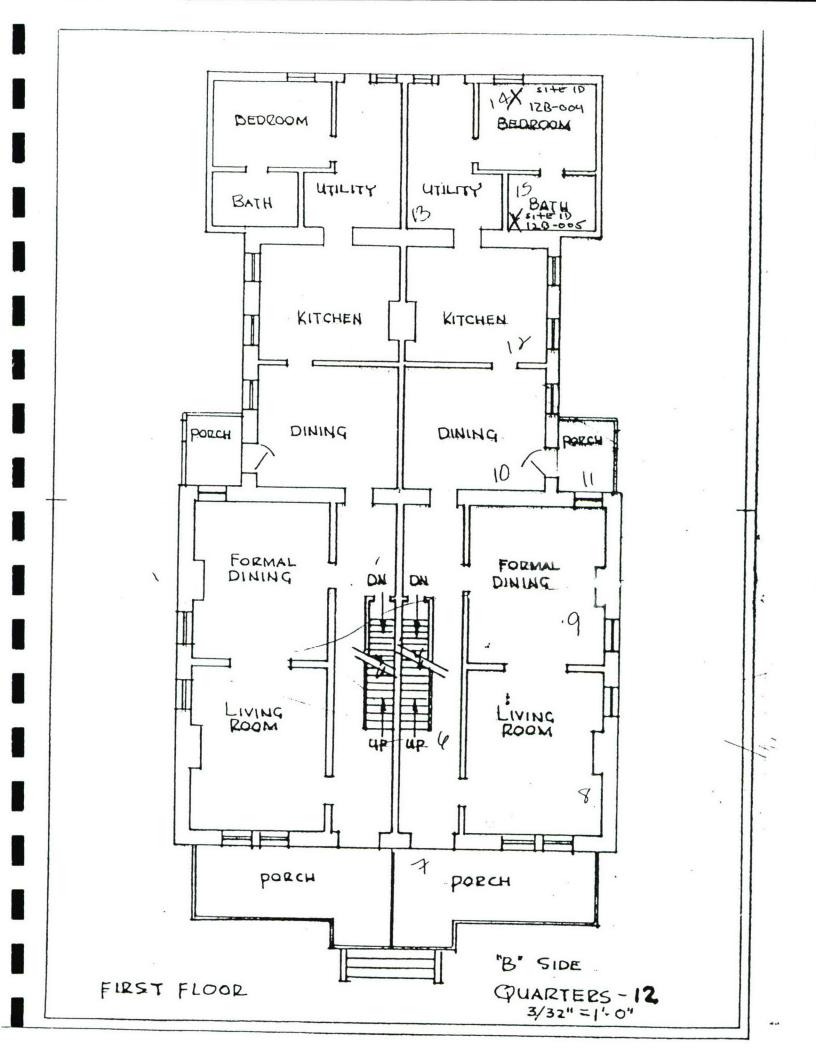


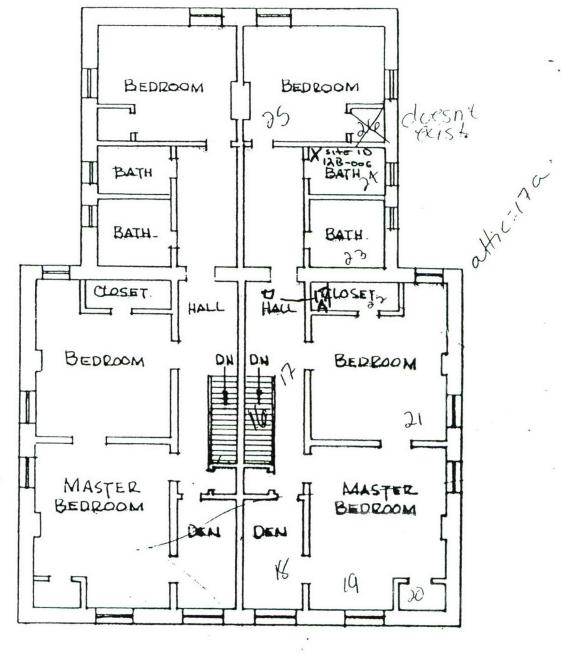
SECOND FLOOR QTRS. 12A



BASEMENT

QUARTERS 12

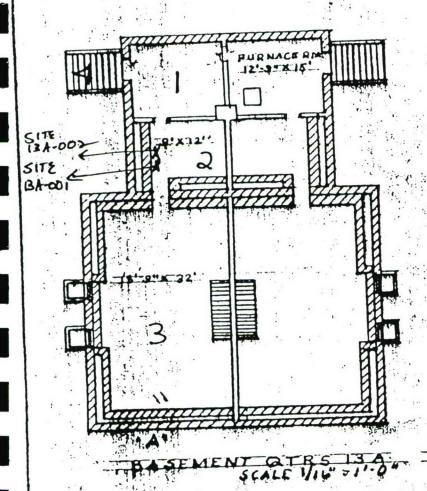


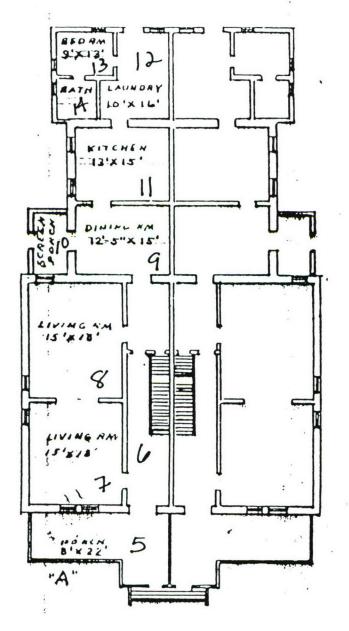


B' SIDE

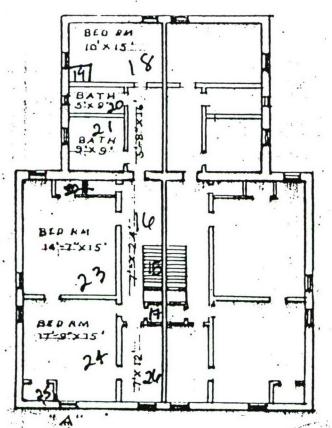
SECOND FLOOR

QUARTERS 12 3/32" = 1'-0"



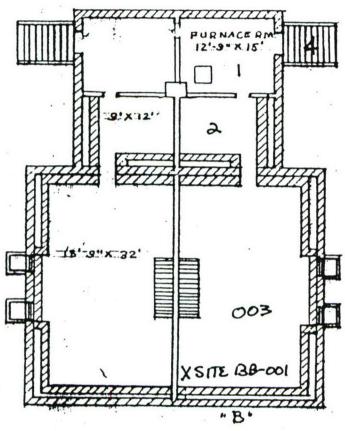


FIRST FLOOR QTRS 13 A &



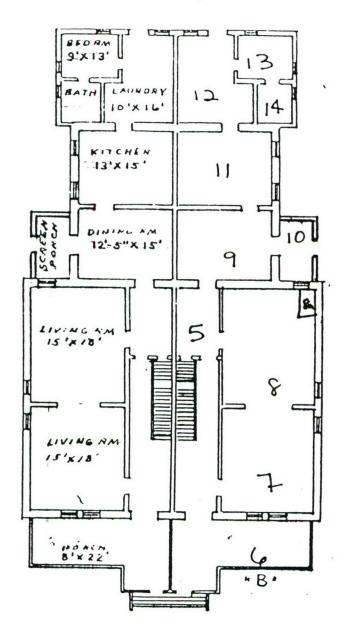
ATTIC=16a

SECOND FLOOR OTRS. 13A

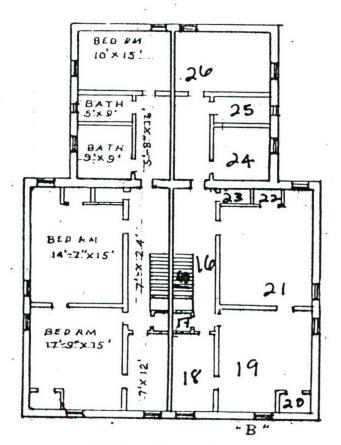


SCALE VIL :1'-6"

1,3 B

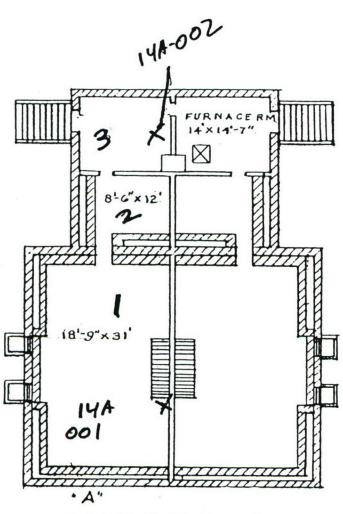


FIRST FLOOR QTRS 13

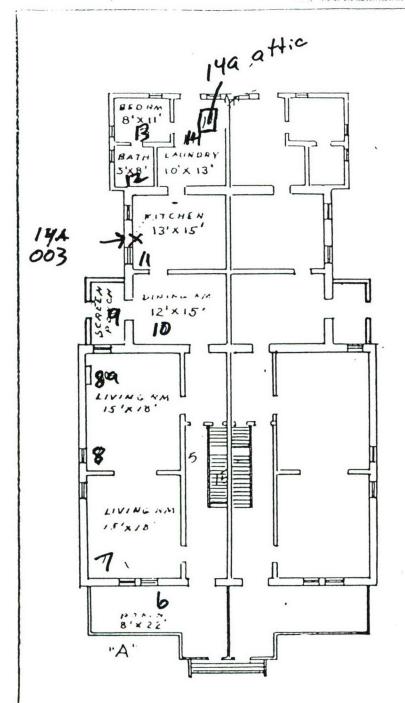


ATTIC = 16a

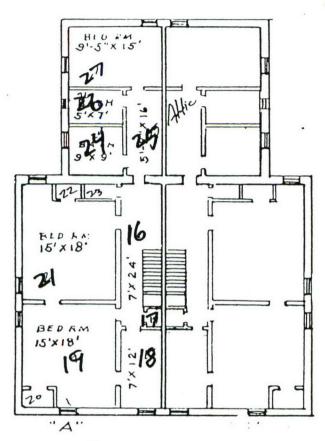
SECOND FLOOR OTRS, 13 B



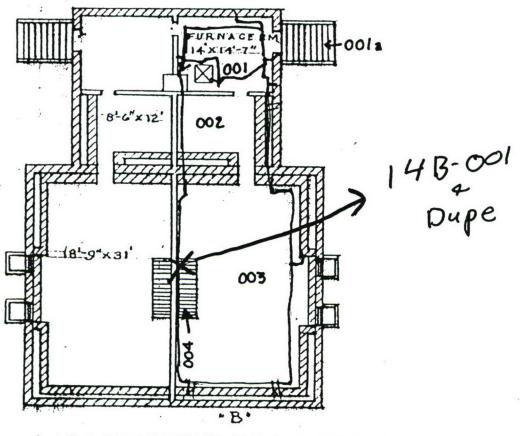
BASEMENT QTRS 14A



FIRST FLOOR QTRS. 14 A SCALE 1/16" = 1'-0"



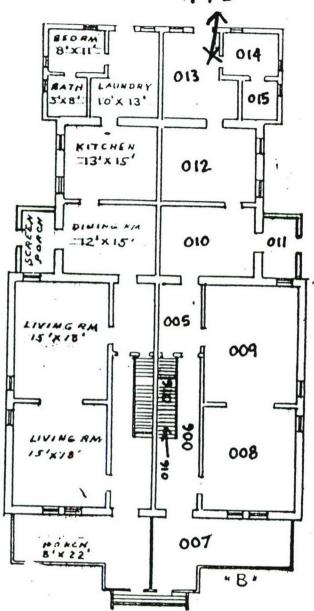
SECOND FLOOR OTES 14A



BASEMENT QTRS IA -B

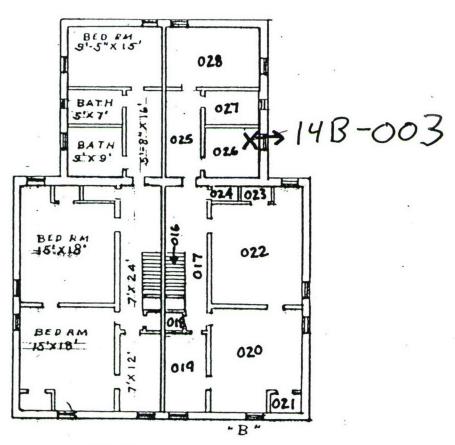
JN

14B-00Z



FIRST FLOOR QTRS. 14 B

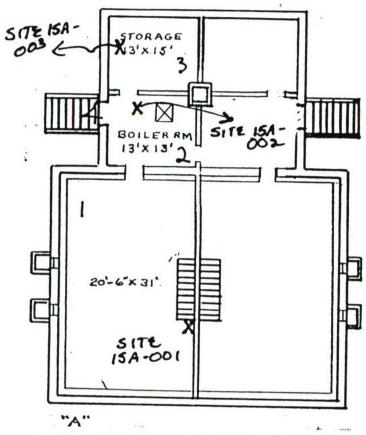
IN



SECOND FLOOR OTRS 14

**B** .....

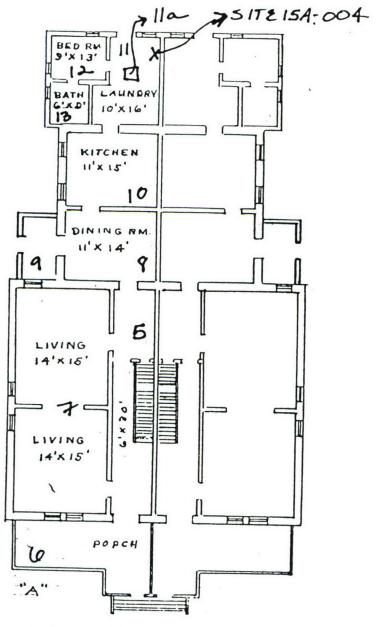
IN



BASEMENT GTRS 15 A-B

SCALE 1/16"=1'-0"

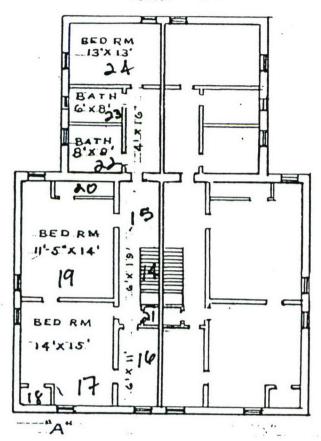
15A



The same and the s

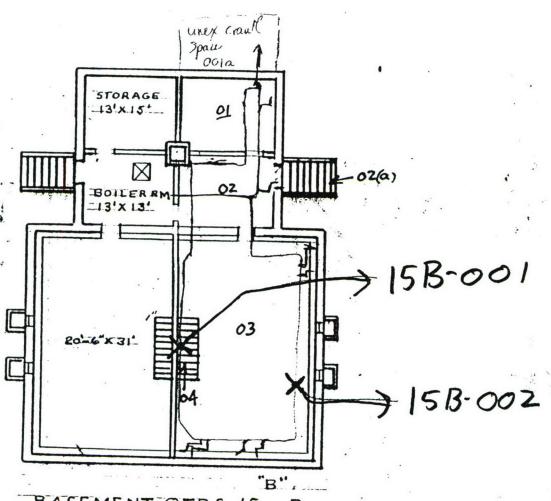
FIRST FLOOR QTRS 15A SCALE 1/16"=1'-0"

## ATTIC= 15a

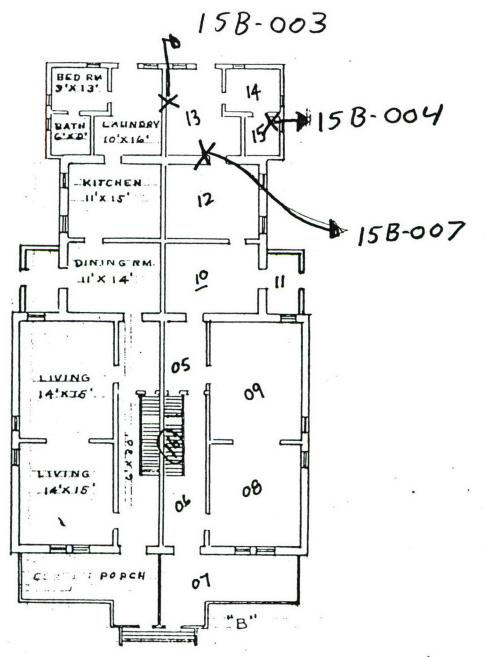


SECOND FLOOR OTRS 15A

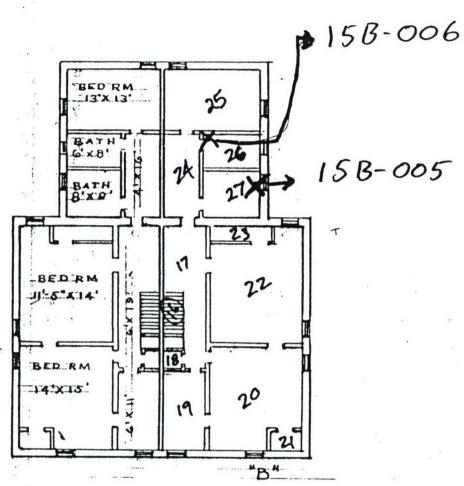




BASEMENT GTRS 15 B

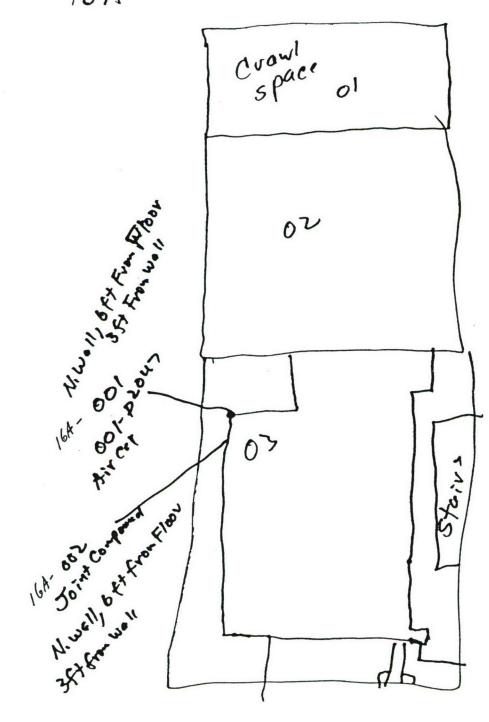


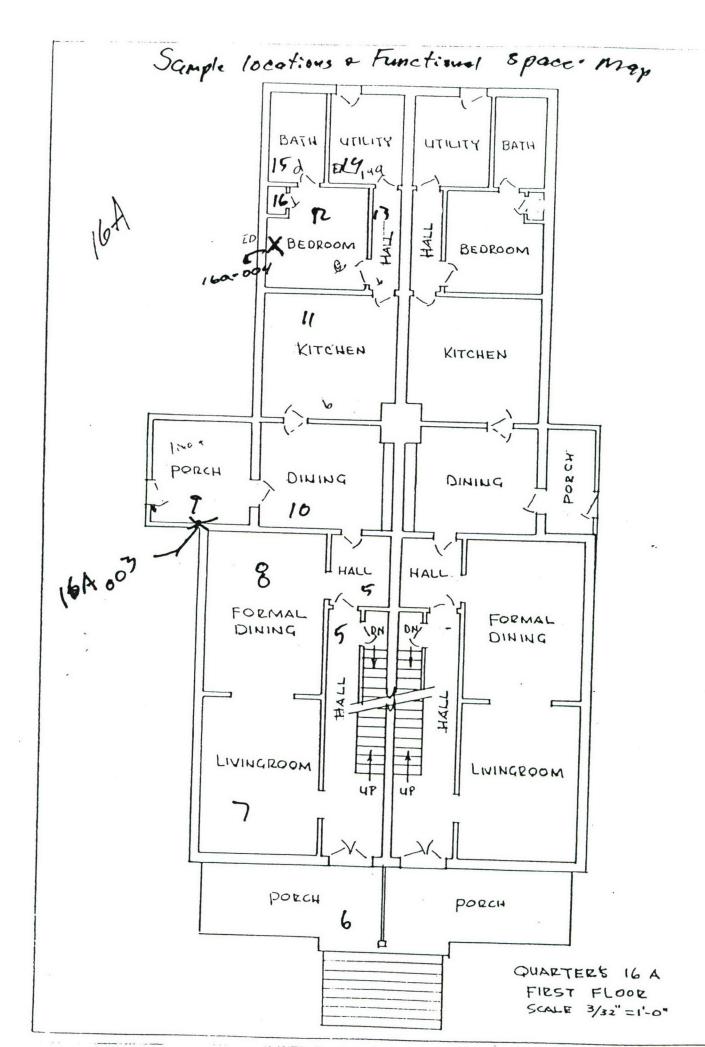
FIRST FLOOR QTRS 15 B SCALE 1/16"=1'-0"

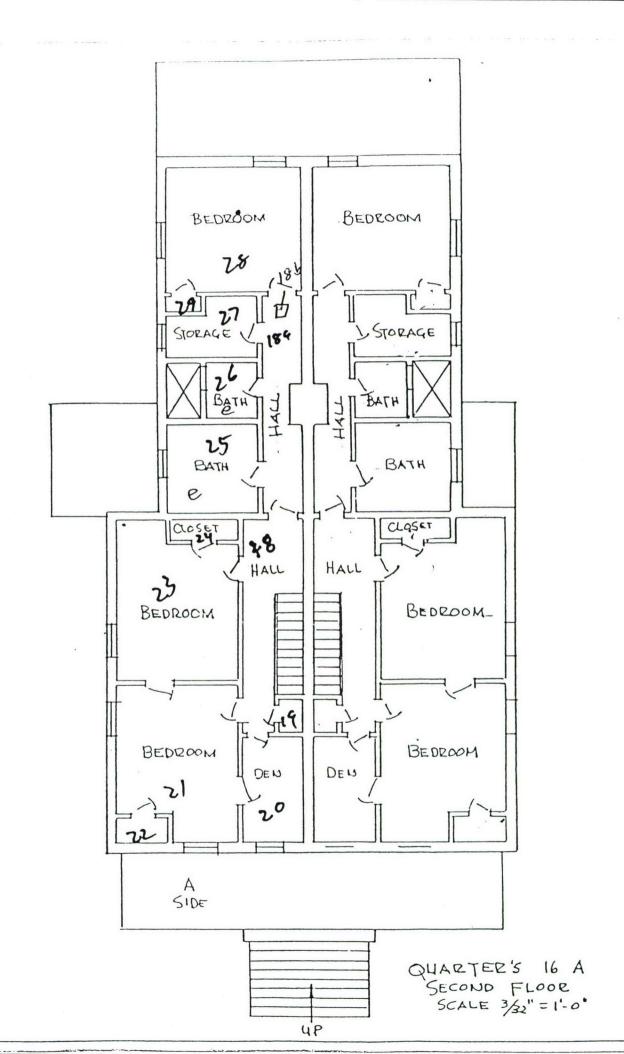


SECOND FLOOR GTRS 15 B

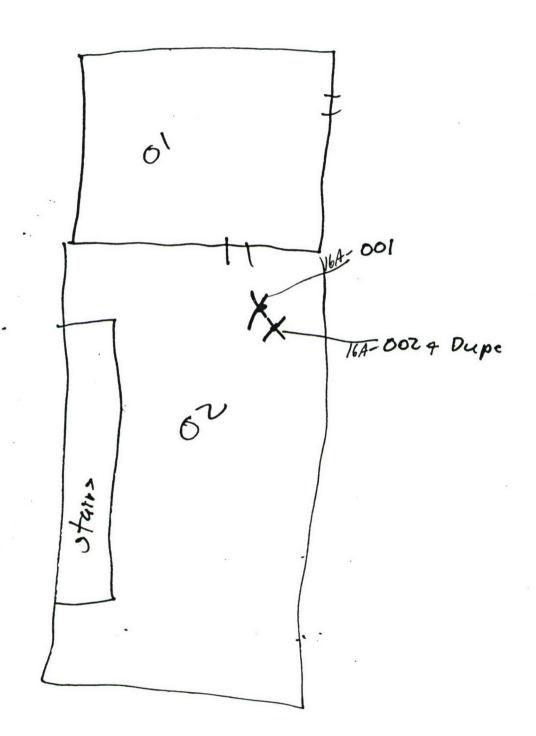
Base ment 16A



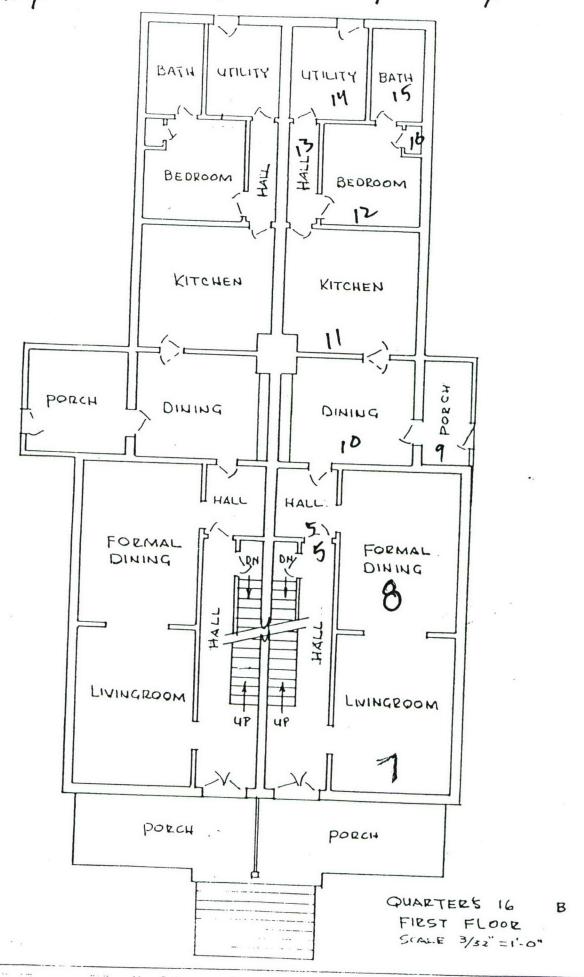


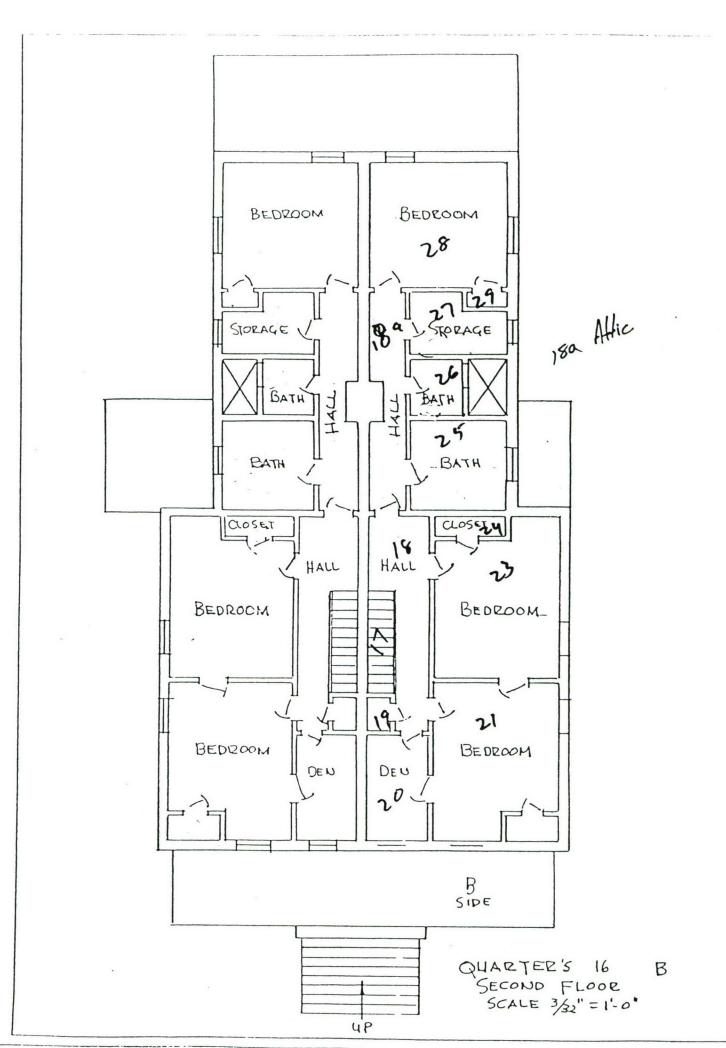


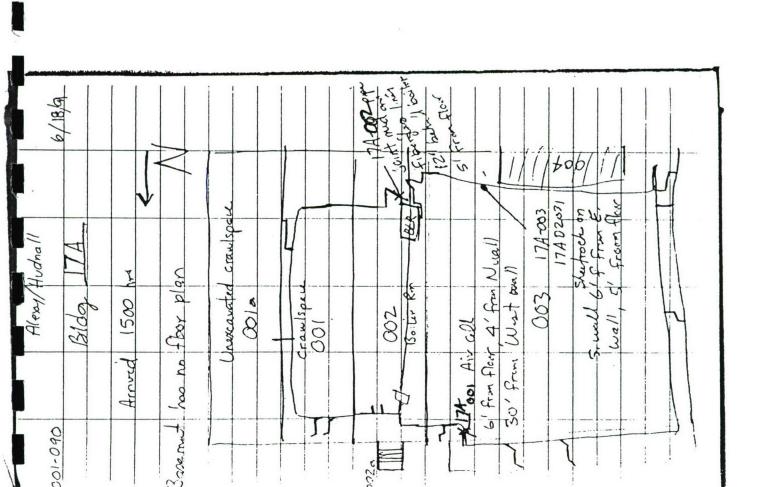
16 B Sample lo cotion.

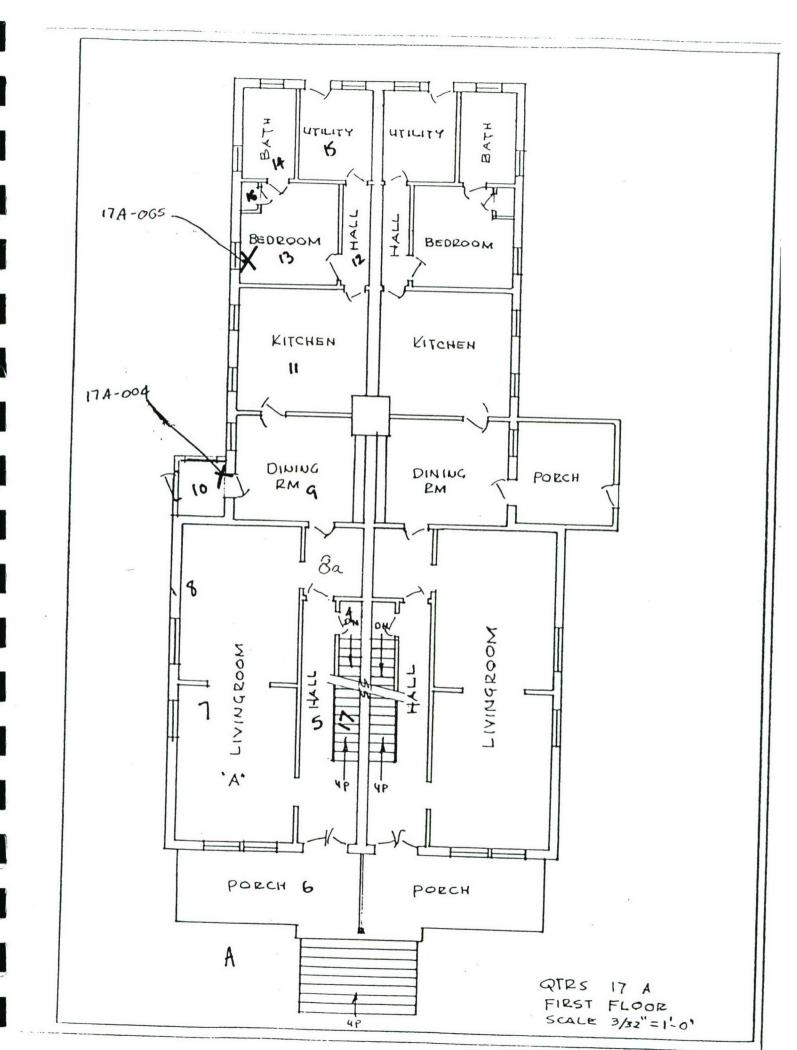


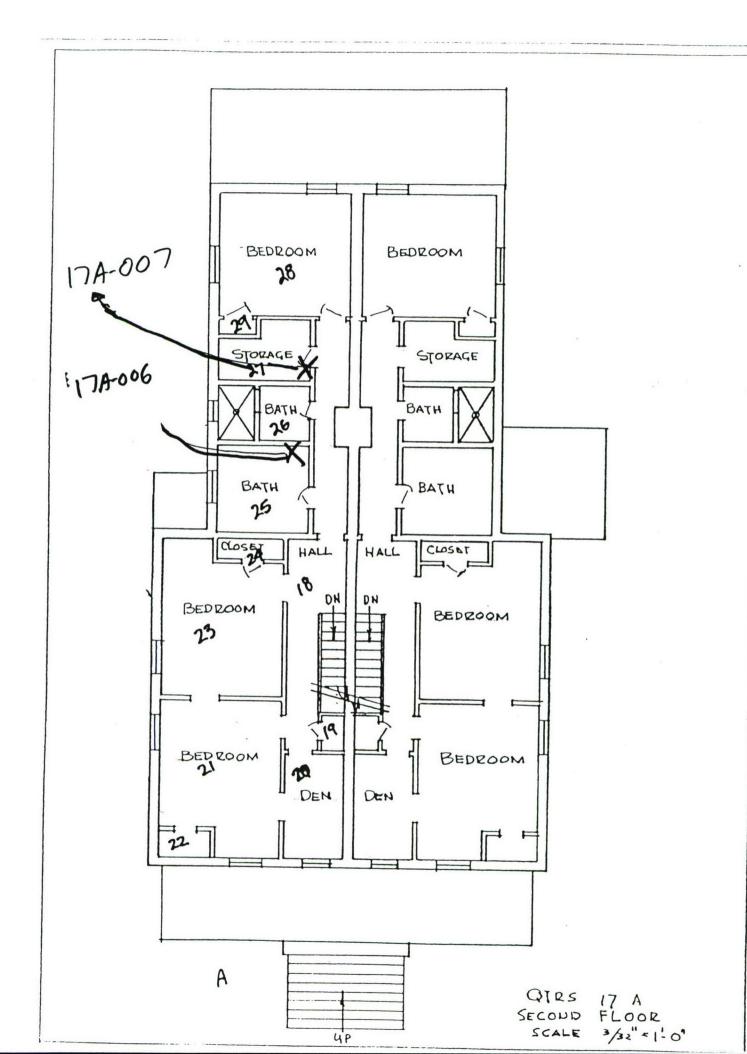
## Sample locations + Functional Space Map



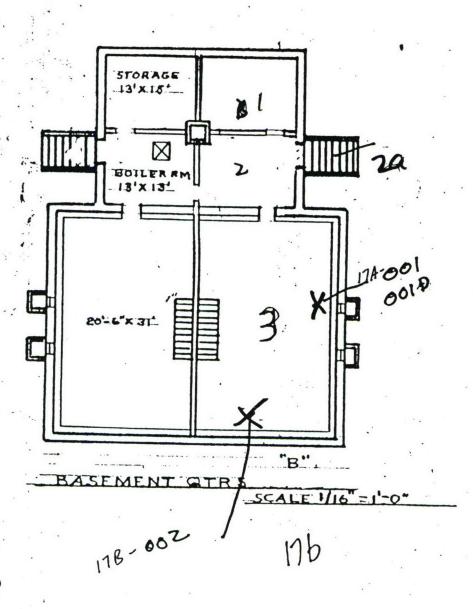


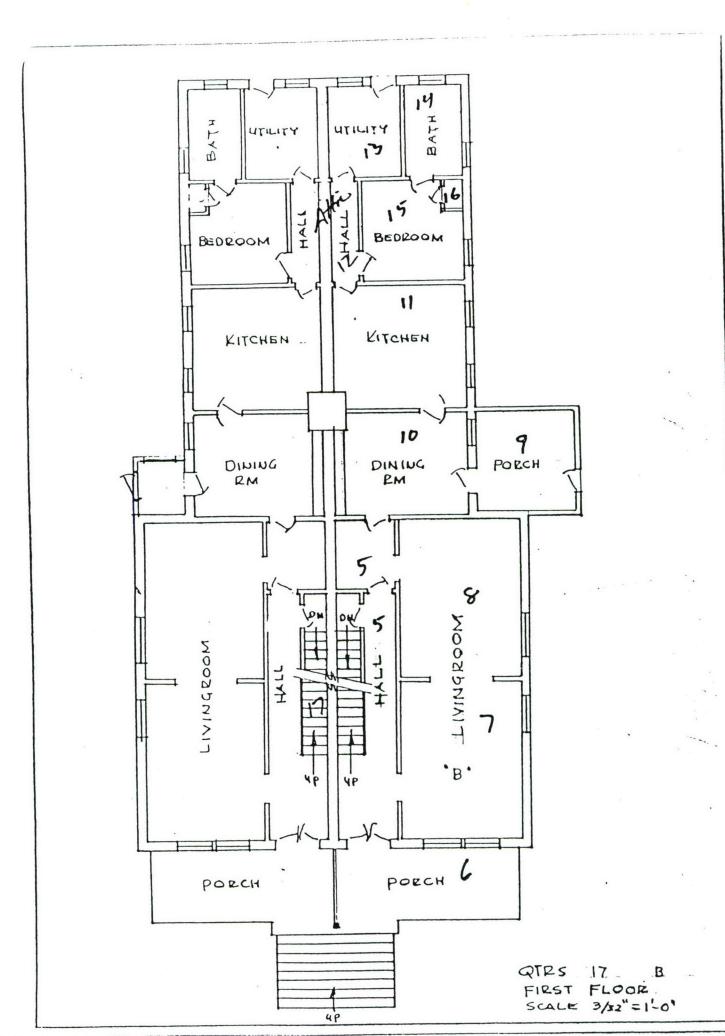


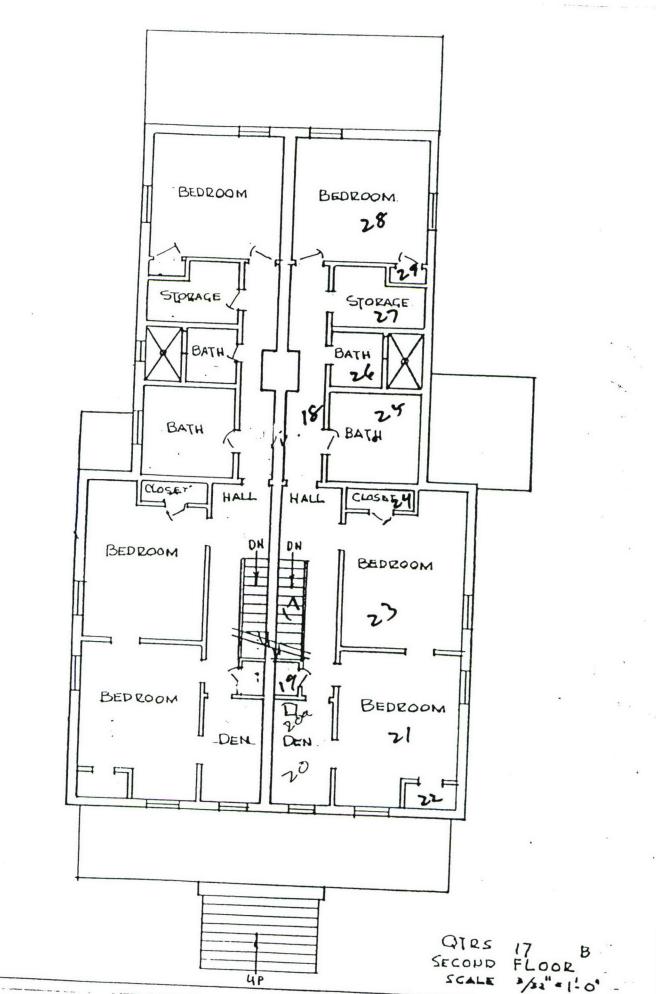




## Sample location map & Functional Space map



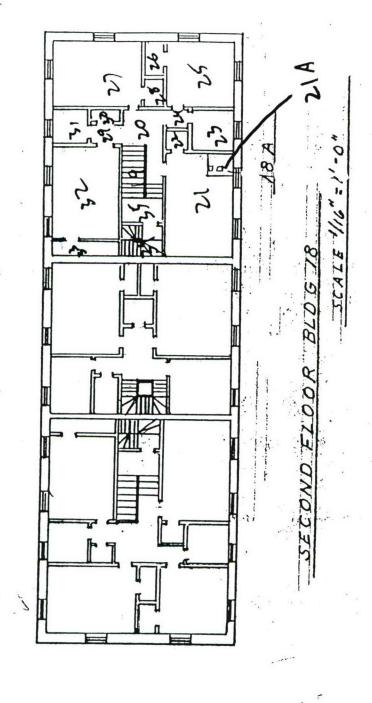




3/32" = 1:0"

Functional Spaces

294 FD-1



11

0 40

accomble

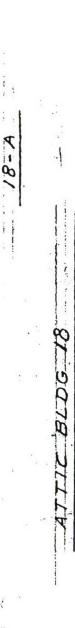
847.H

RM.

101 X 101

Not ble

BEDRA BATH

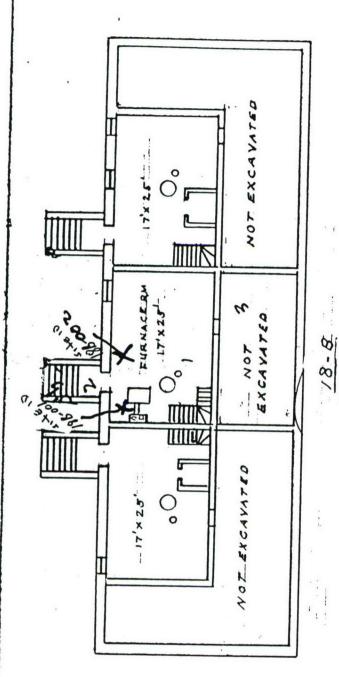


SCALE 116"=1

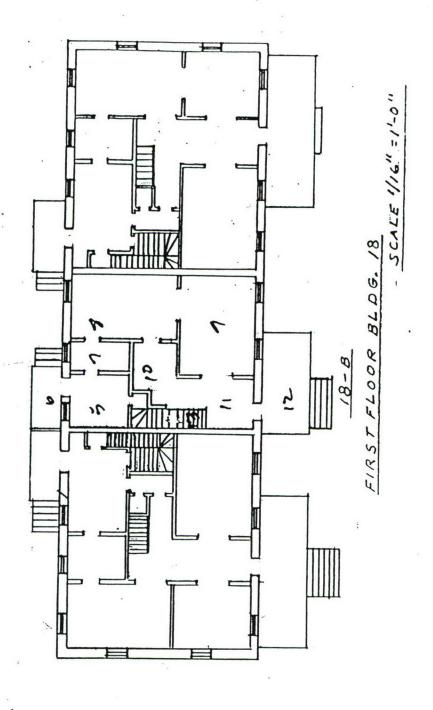
----

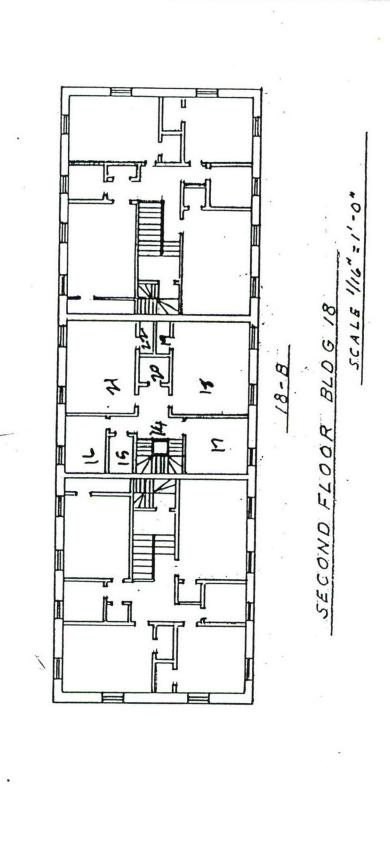
.

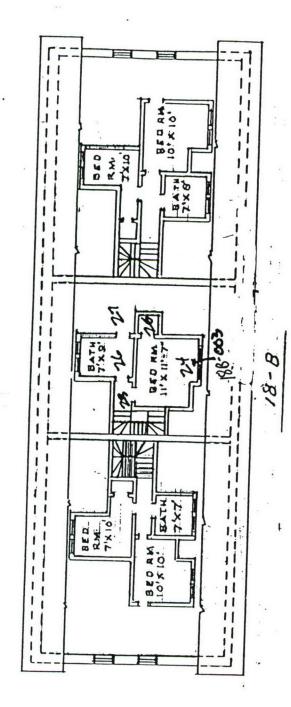
\_



BASEMENT BLOG. 18 SCALE 1116".

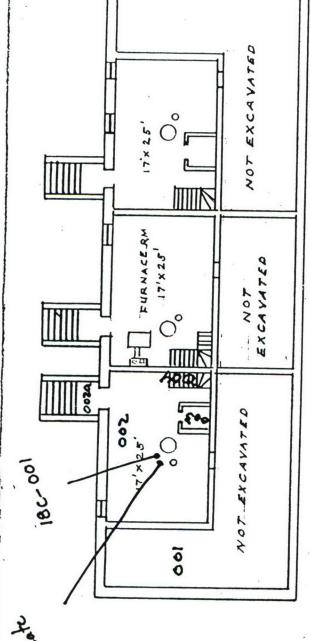






ATTIC 820G 18

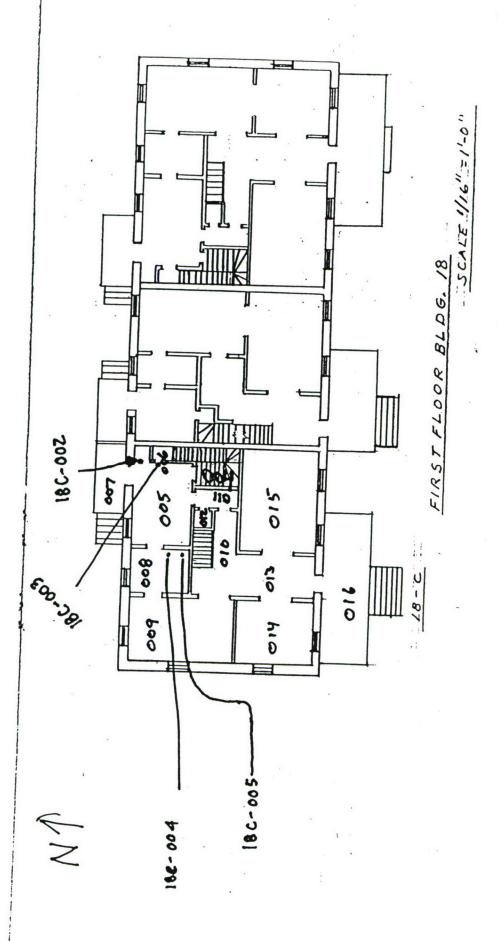
SCACE 1/16"=11-0"



18-6

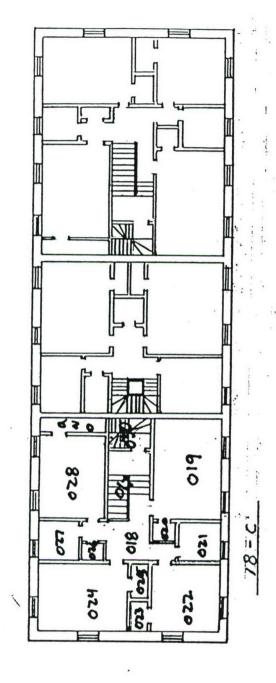
BASEMENT BLOG. 18 SCALE 116"=1'-

Sample #5



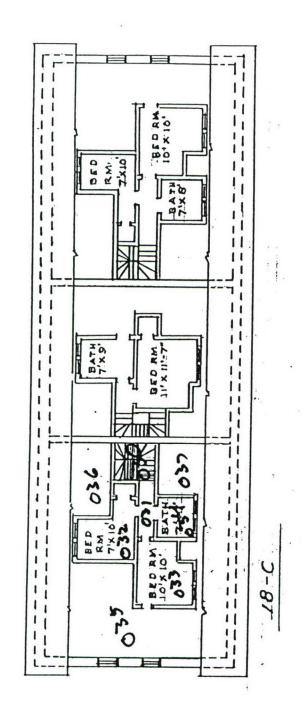
Sample #'S

>



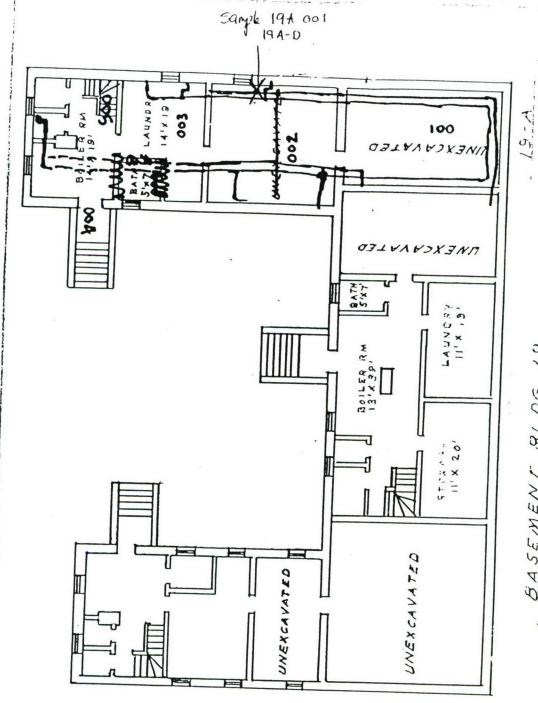
3CALE 116"

SAMPle #'s



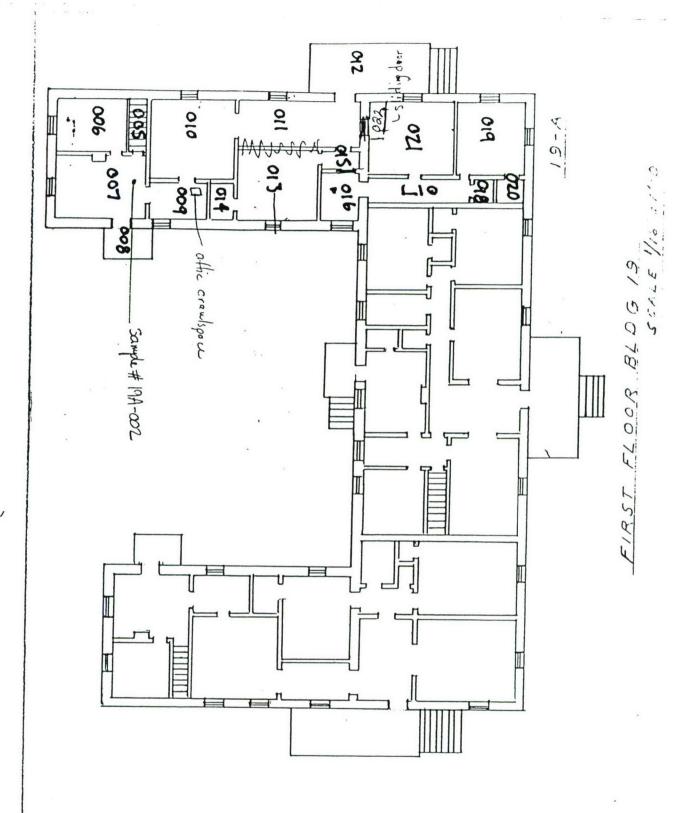
ATTIC '820G 18 SCALE 116"=1

Sample #13

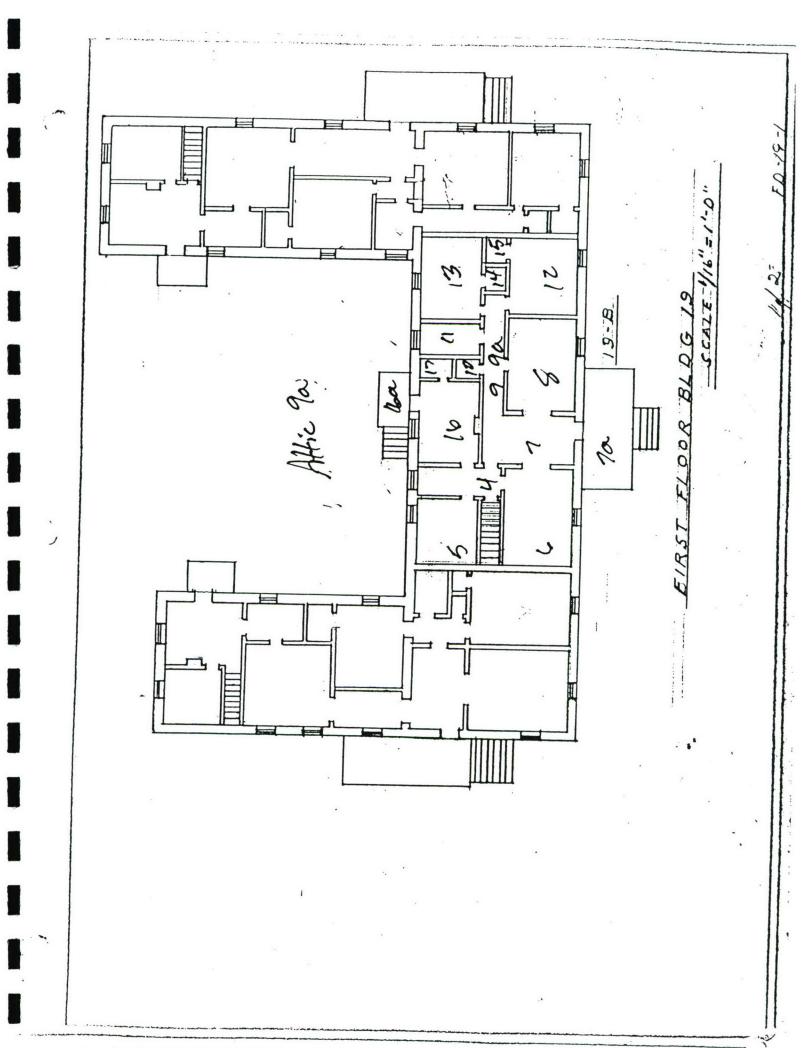


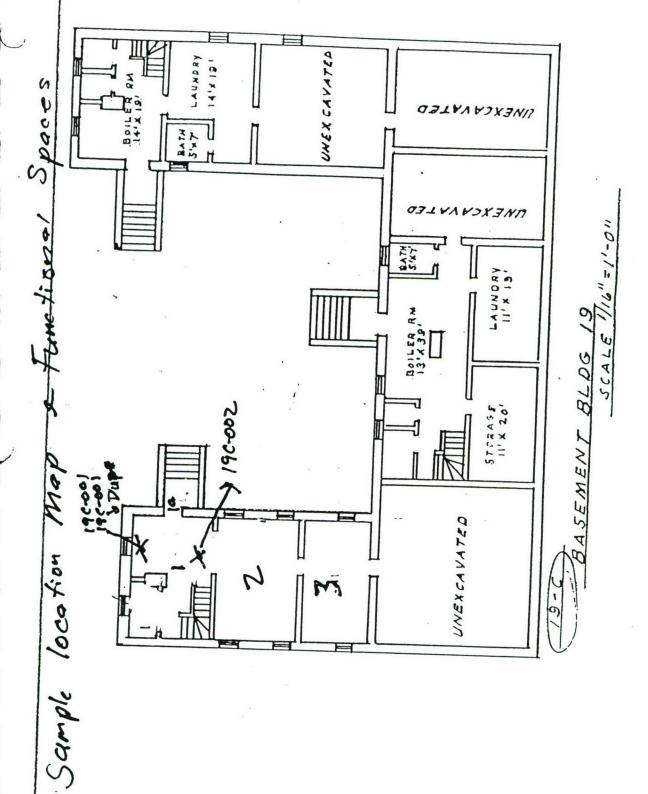
BASEMENT BLOG 19 SCALE 716"=1"-0"

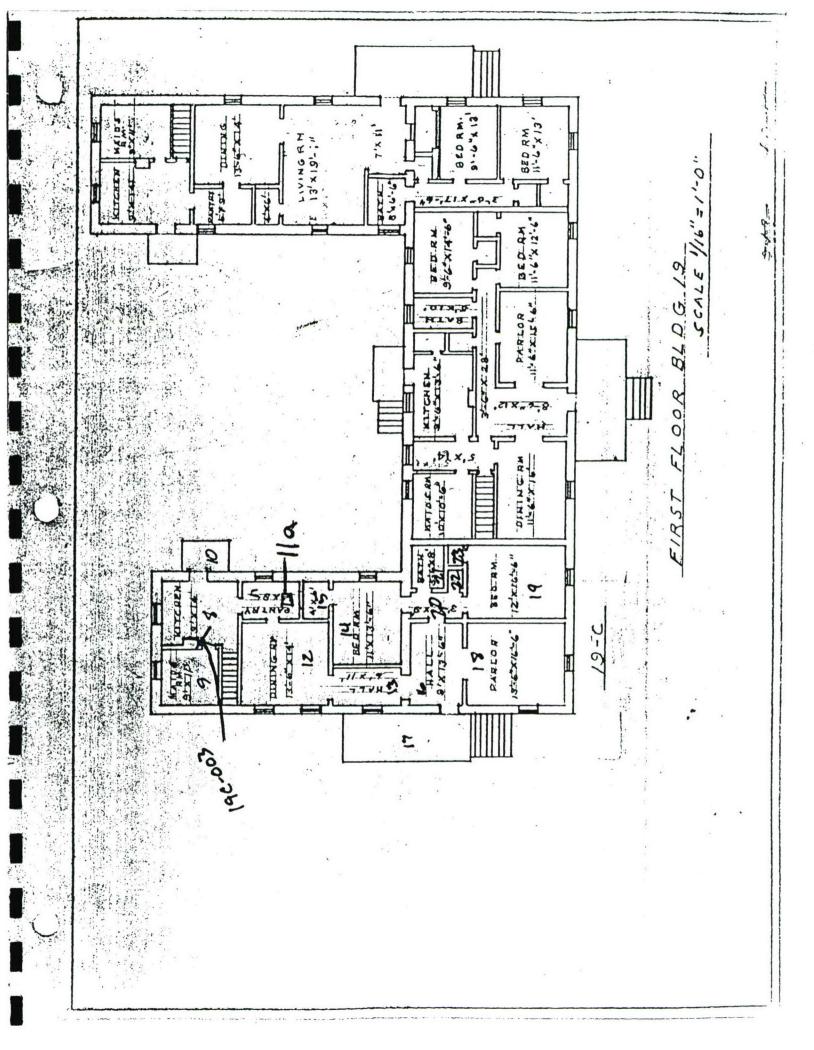
1



**₹** ×

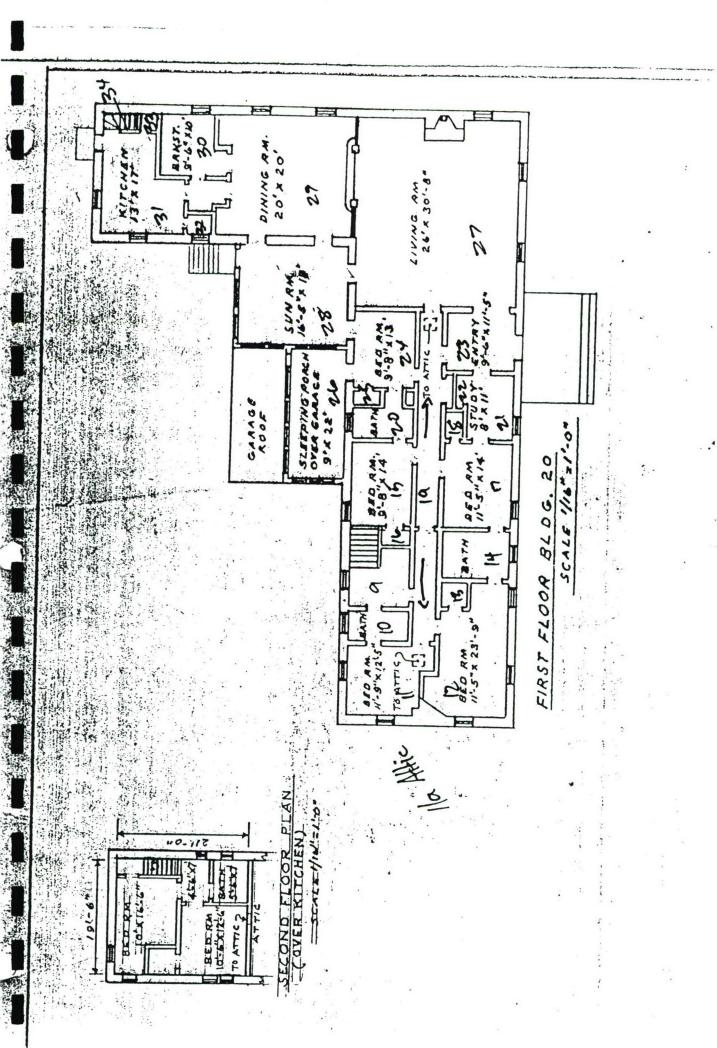




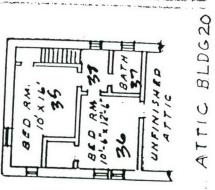


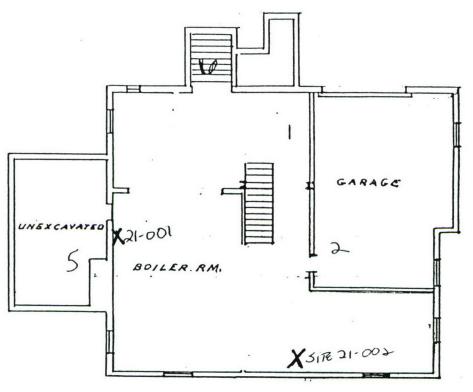
eggi

monthson Alexant



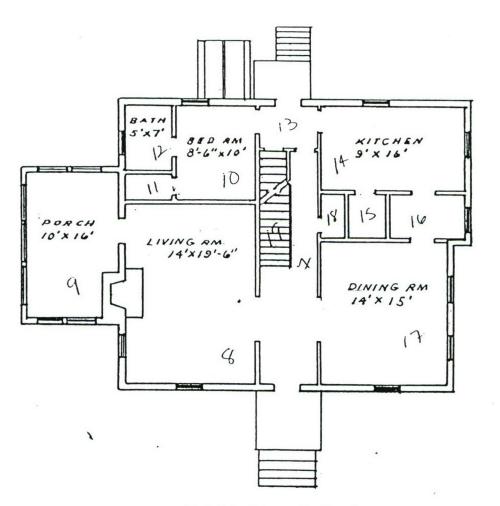
(69)





BASEMENT BLDG 21
- SCALE 3/32"=1'-0"

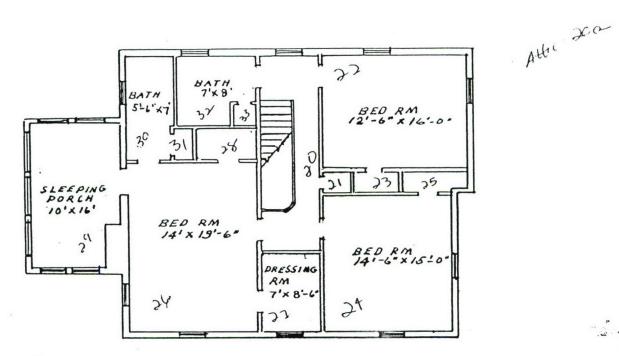
functional spaces 3: 4
functional do not exist



FIRST FLOOR BLDG 21 SCALE 3/32"=1'-0"

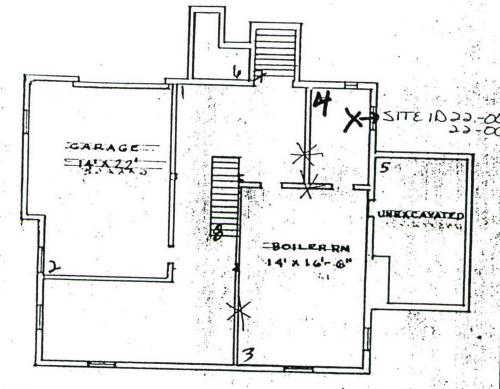
3/07.

e 7 - 21 - 24



SECONO FLOOR BLOG 21

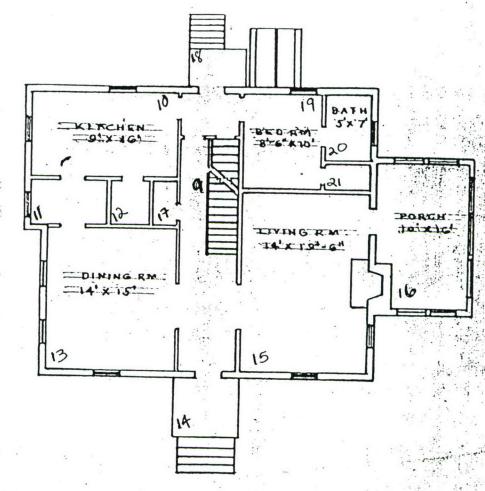
SCALE 3/82" -1'-0"



BASEMENT GTRS 22

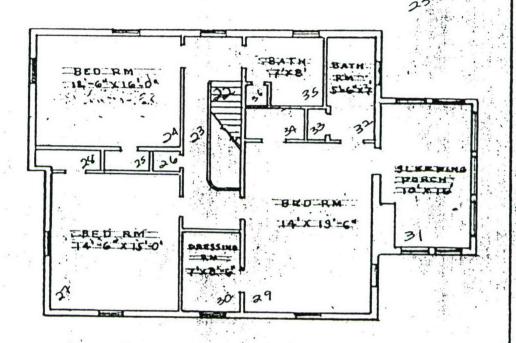
SCALE 3/32"=1-0"

X = walls no longer exist



FIRST FLOOR QTRS. 22

SCALE 3/32"=1'-0"

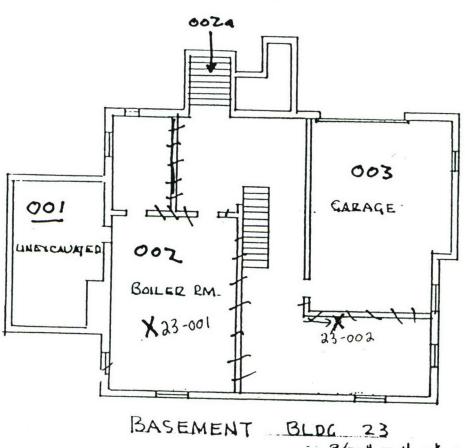


SECOND FLOOR QTRS. 22

SCALE 3/32 =1'-0"

L ...

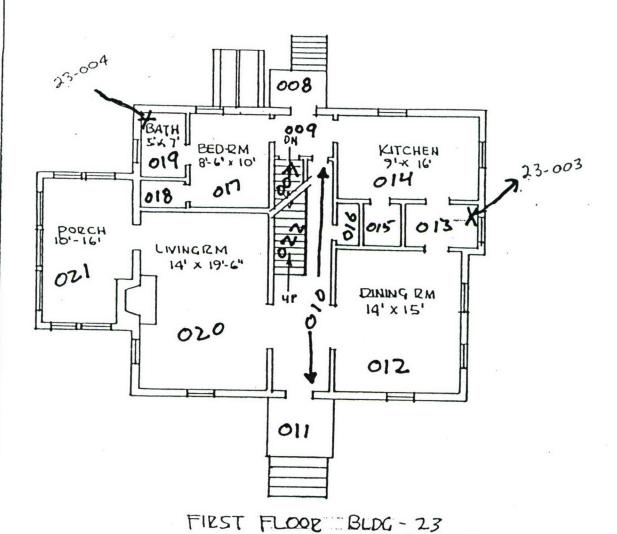




BASEMENT BLDG 23

Sample locations 6-13-91

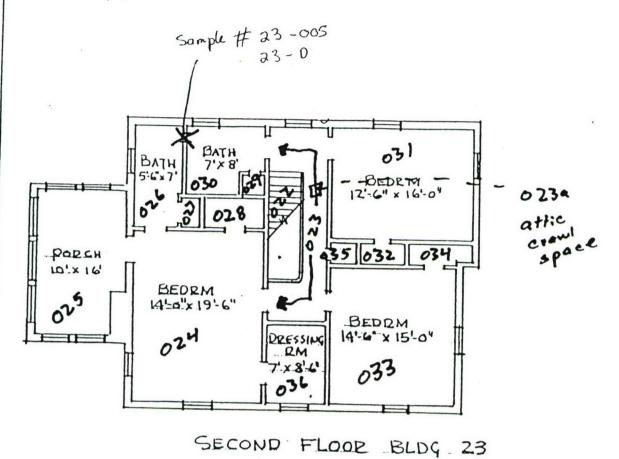
NA



Sample locations
6-13-91

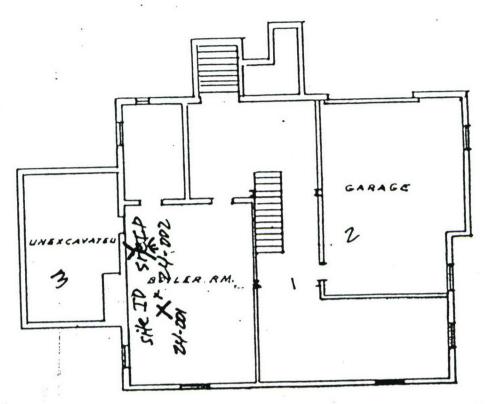
3/324=1-04

NT



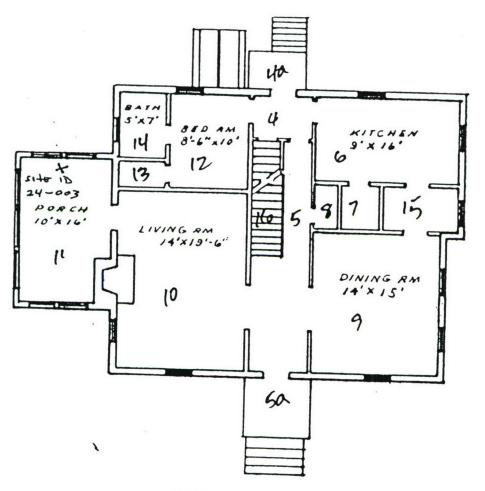
Sample locations
6-13-91

3/32" =1-01



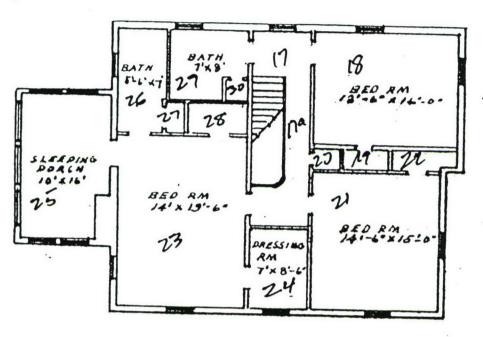
BASEMENT BLDG 24 SCALE 3/32"=1'-0"

2 .. .



FIRST FLOOR BLDG 24 SCALE 3/32"=1'-0"

170 Affic

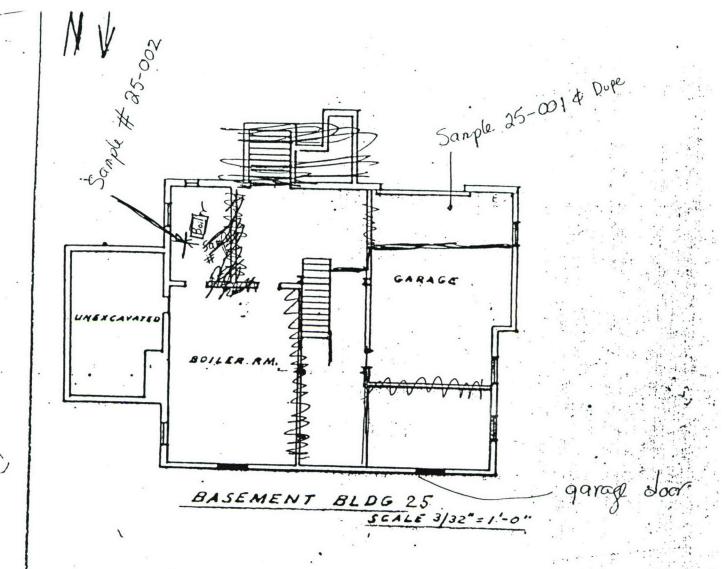


## SECONO FLOOR BLOG 24

SCALE 2/22" +1'-0"

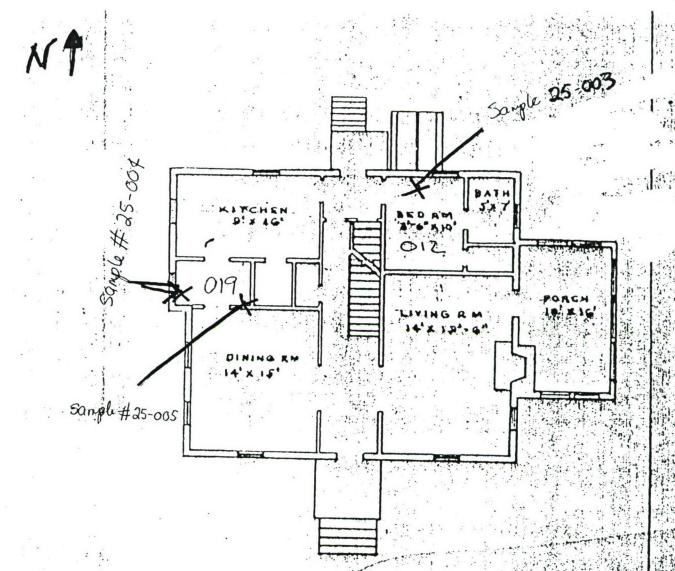
## SAMPLES TAKEN FROM ROOF AREA!

24-004 24-005 24.006



Sample locations

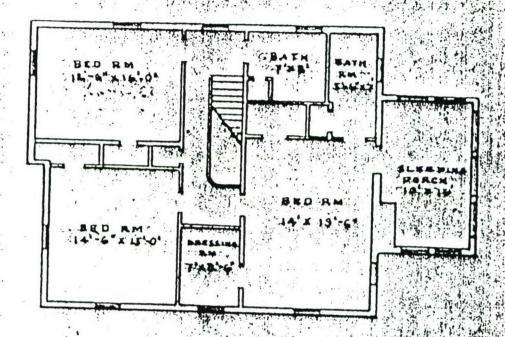
21-14



FIRST FLOOR QTRS. 25

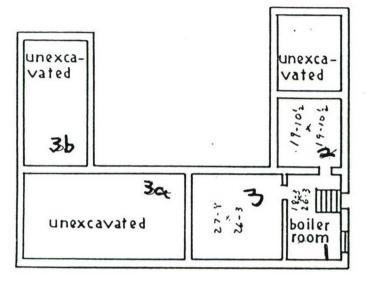
SCALE 3/32"=1'-0"

Sample locations

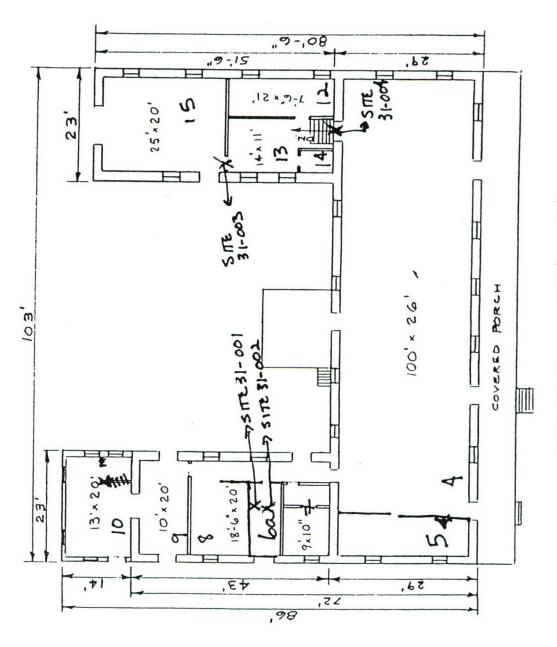


SECOND FLOOR OTRS. 25

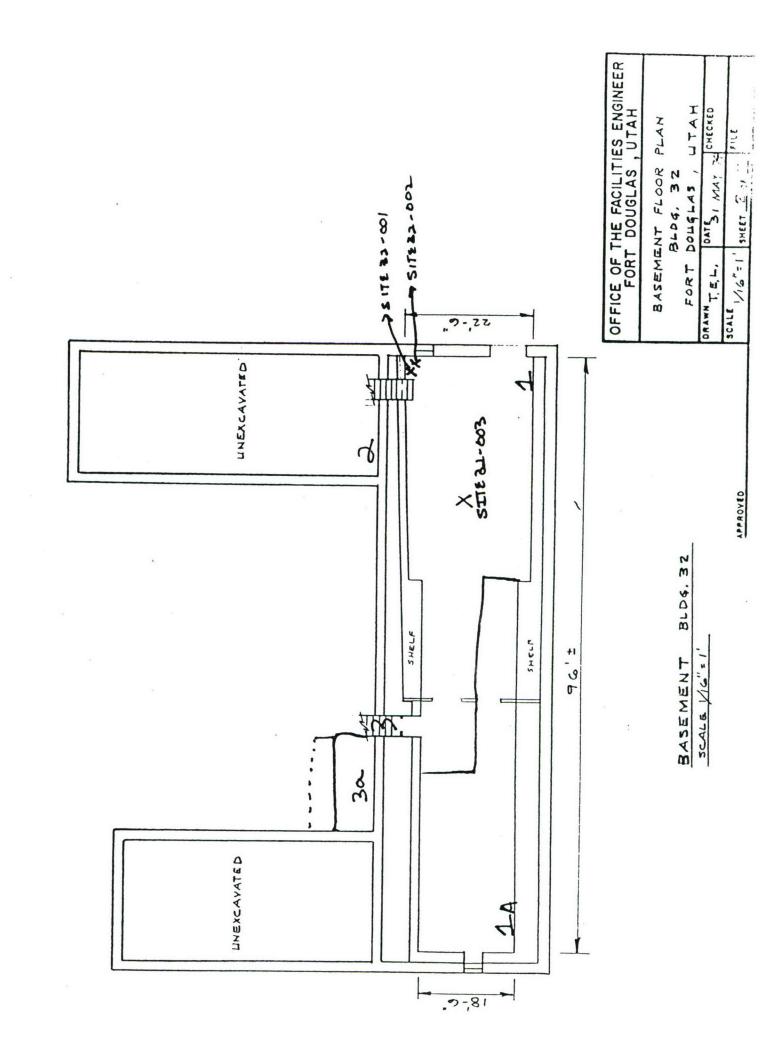
Sample locations

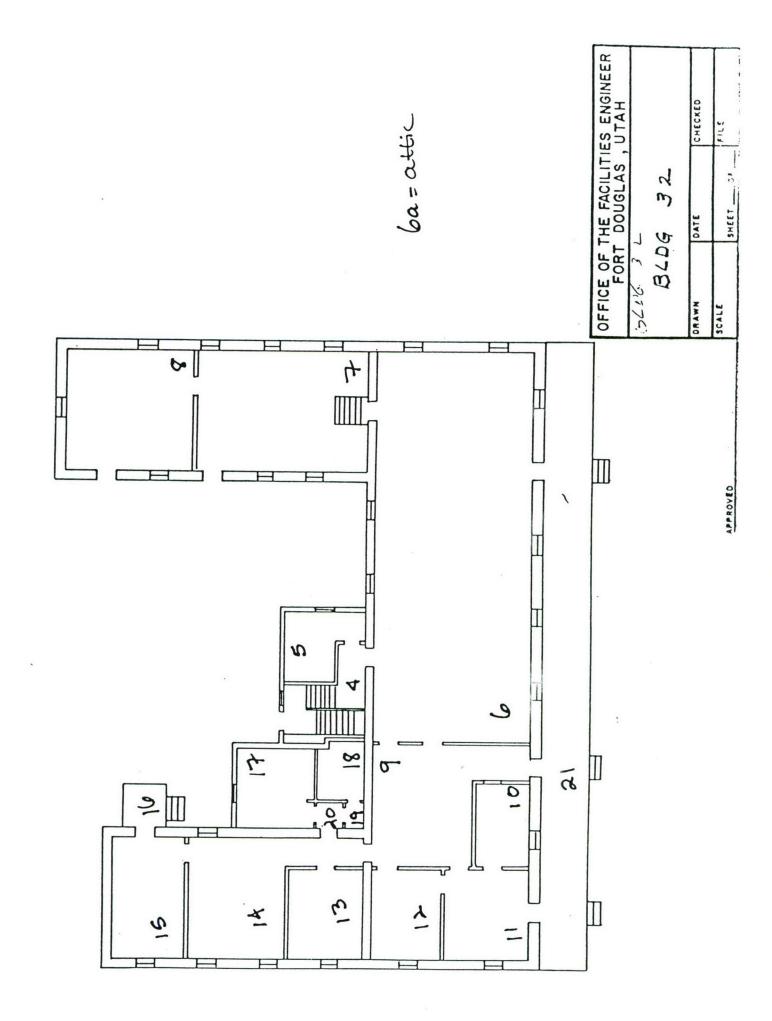


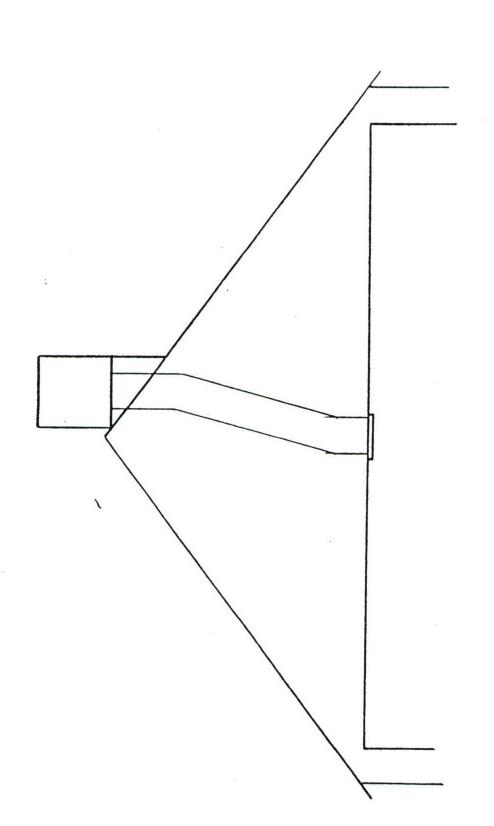
BASEMENT-BLDG-31
SCALE 1=30



111= walldos not exist

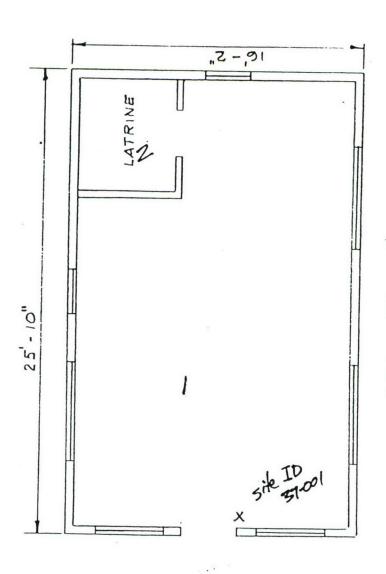






INSTALLATION OF AIR CONDITIONER BLDG. 32 OFFICE OF THE FACILITIES ENGINEER FORT DOUGLAS, UTAH 17. CHECKED FORT DOUGLAS J JAL T

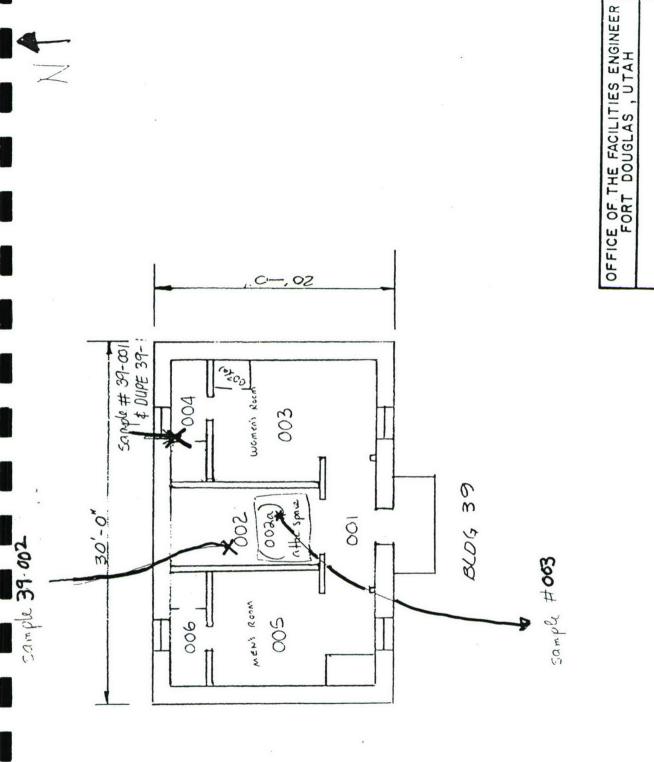
SCALE - 1 ... | FILE



Affic 2a

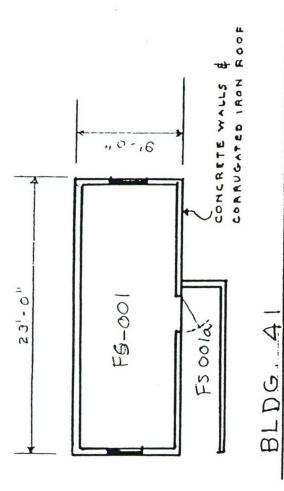
10

SCALE 3/16" = 1'-0"



Per 4.28 39 23 L SCALE 3 SPEET PILE FILE

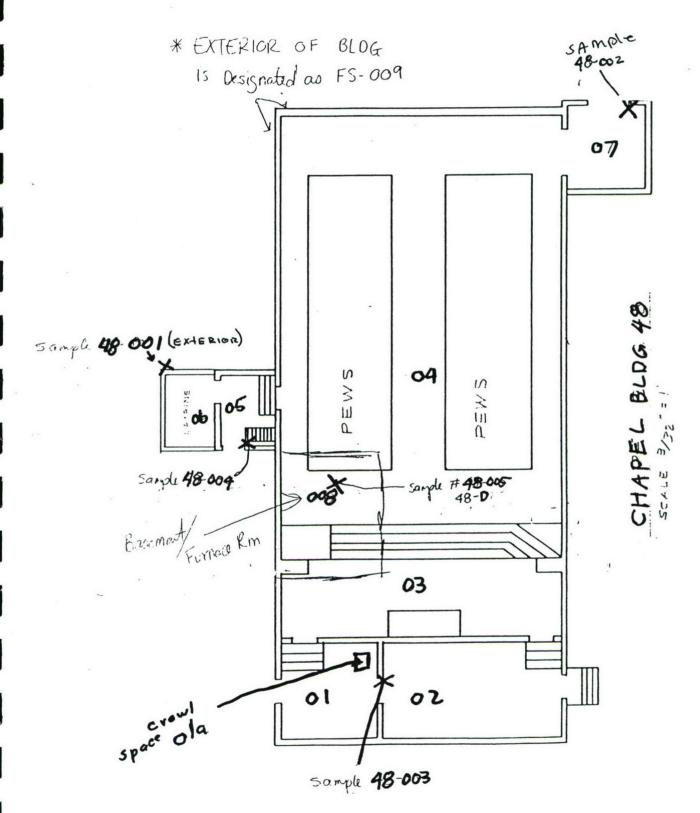
10 JAN 1973



SCALE 1/8' = 1'-0"

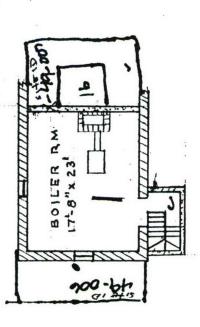
83(%







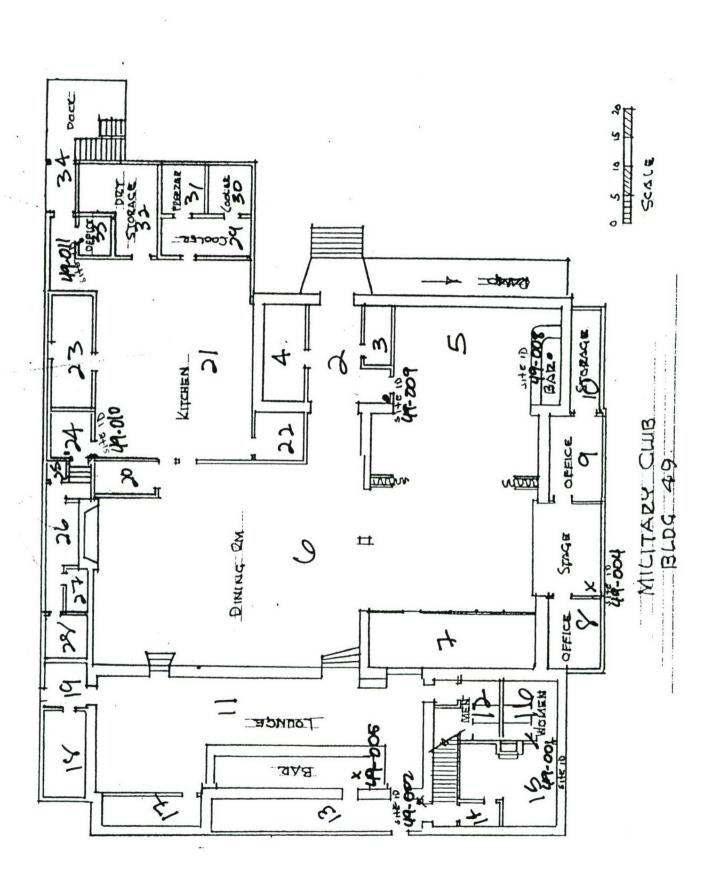
10 JAN 1973

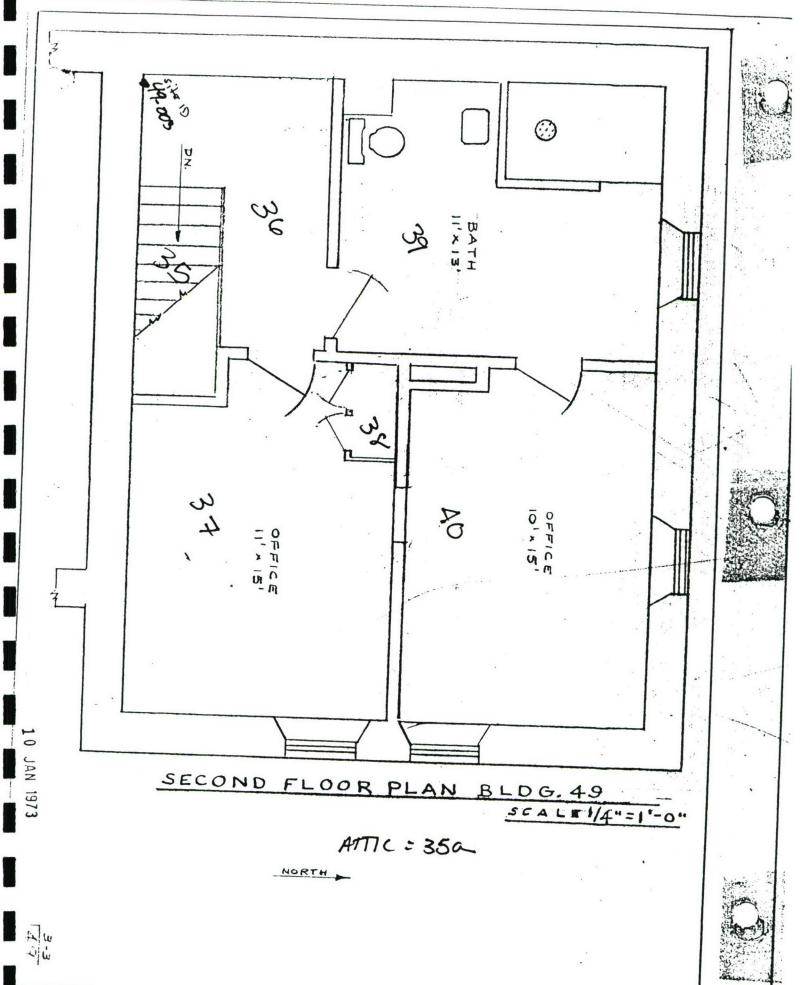


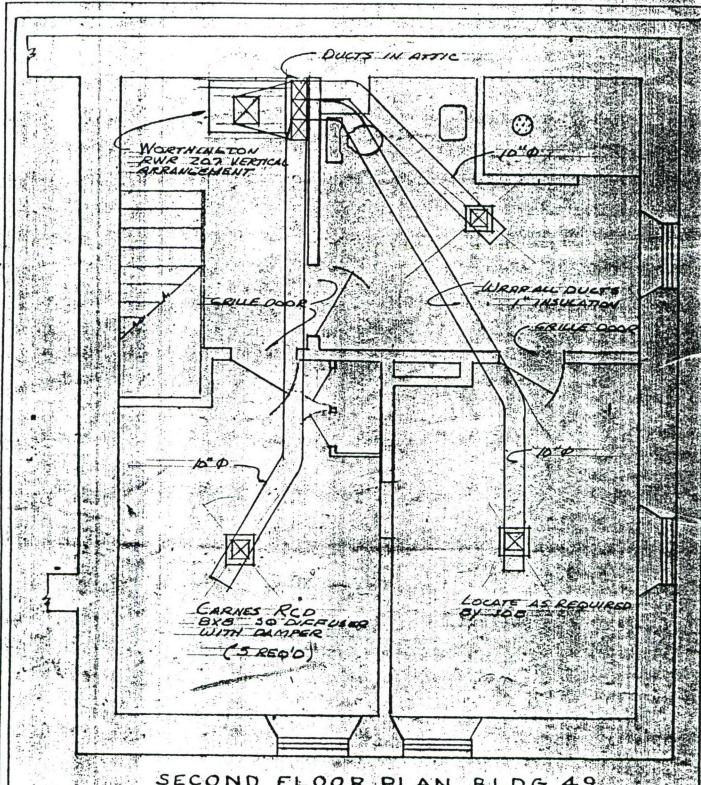
4

SEMENT BLD G. 49

SCALE + 116" = 1'-0"

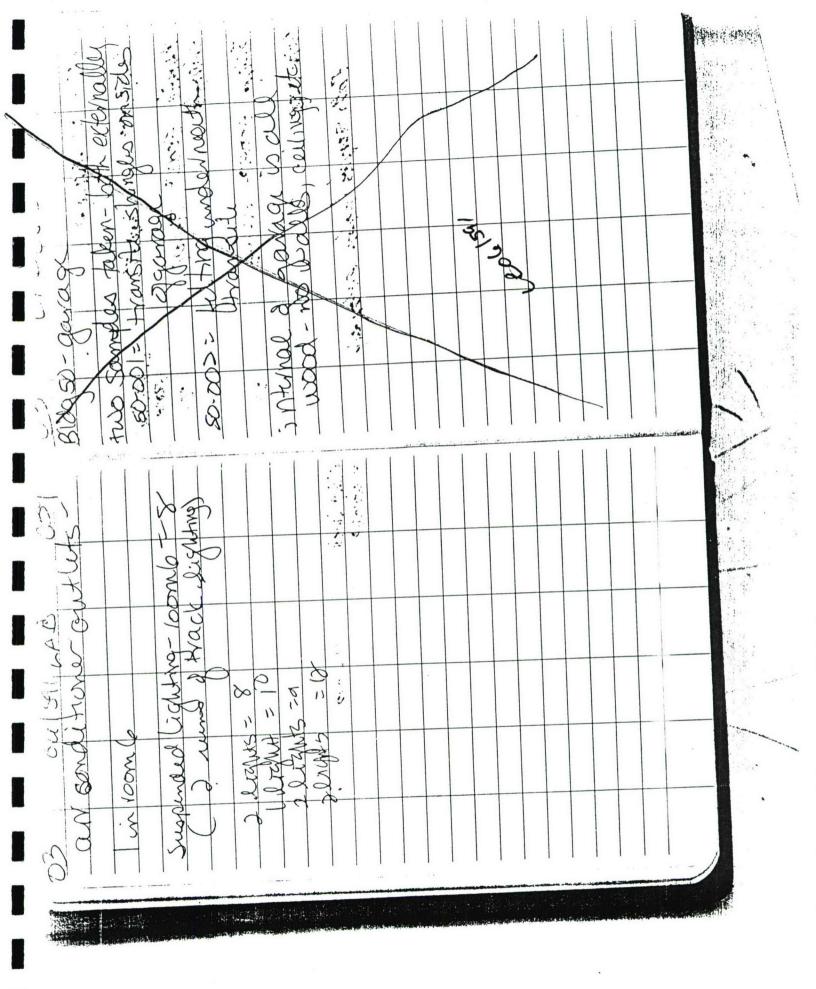






SECOND FLOOR PLAN BLDG. 49

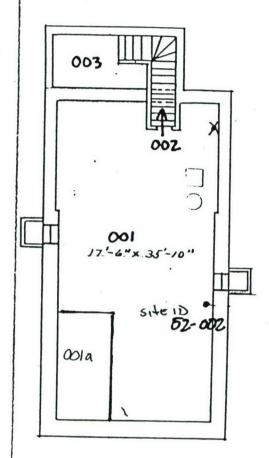
AIR CONDITIONING OFFICERS
QUARTERS
2 July 1958



05 -10/8

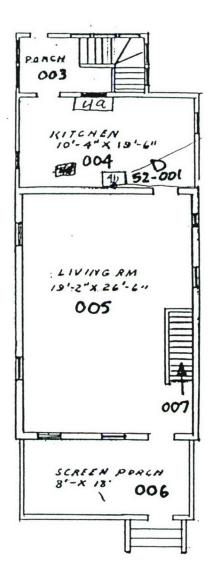
	*				shally		
SARGE	2 Johns	100-69	2010		aten egepha		
69		Himper 1670 542	620 6		anger 1		
ADS	home	Month.	Cellin		VI		
	Instant Space	2	n l				
	A			externelly			
8	Saylet	21-00/	100.15	taper ex			
assary)		2005	500F.	Felt Eugles			
15) SUB	harginer	Marsite	Falting 5	THE STATE OF THE S			





BASEMENT BLDG 52





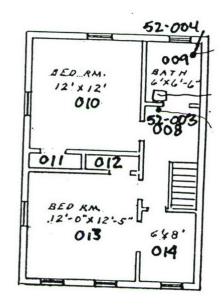
FIRST FLOOR BLDG 52

SCALE 3/32"=1'-0"

.

.

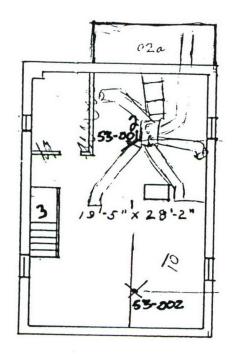
---



SECOND FLOOR BLOG.52 SCALE 3/32"=/LO"

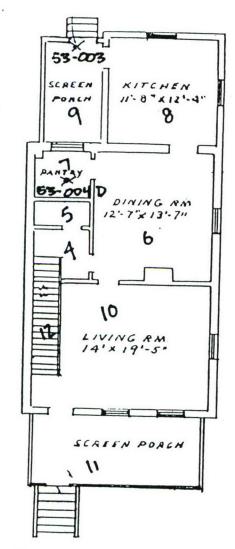
1: . .



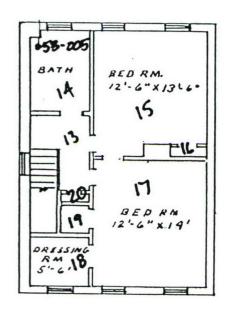


BASEMENT BLOG. 53 SCALE 3/32"=1'-0"





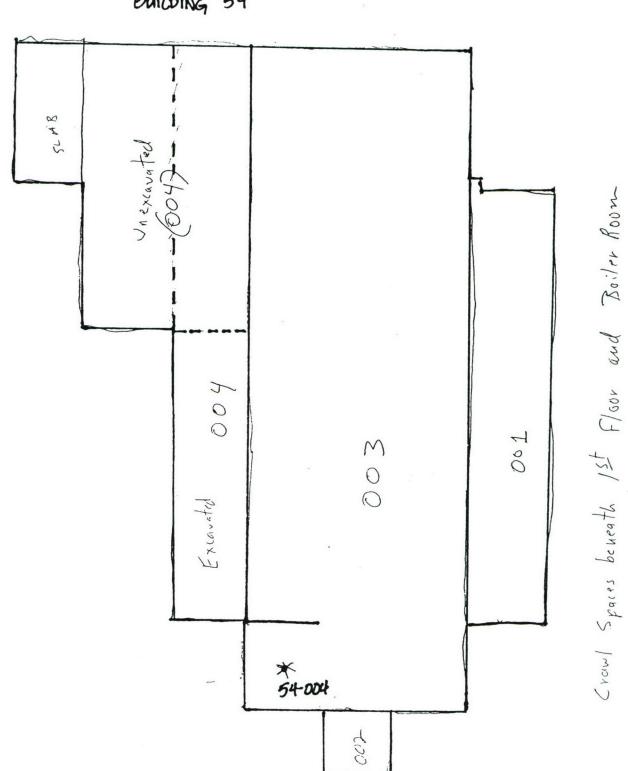
FIRST FLOOR BLDG. 53 SCALE 3/32"=1'-0"

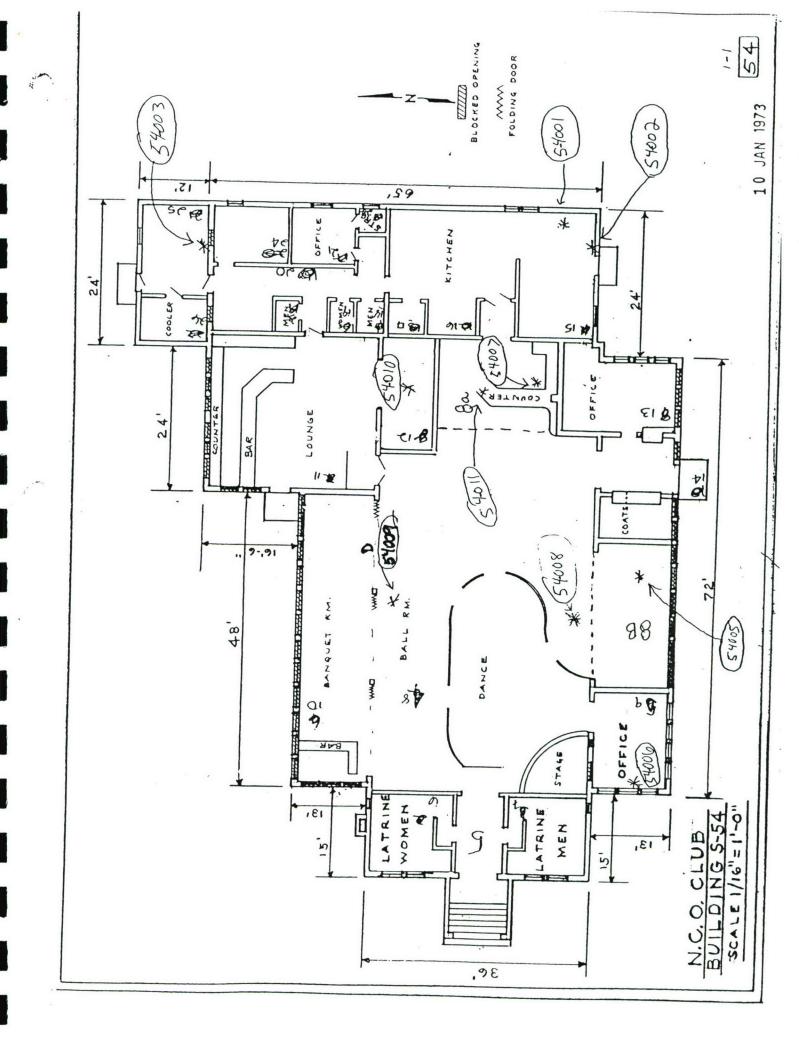


SECOND FLOOR BLDG.53 SCALE 3/32"=1'-0"

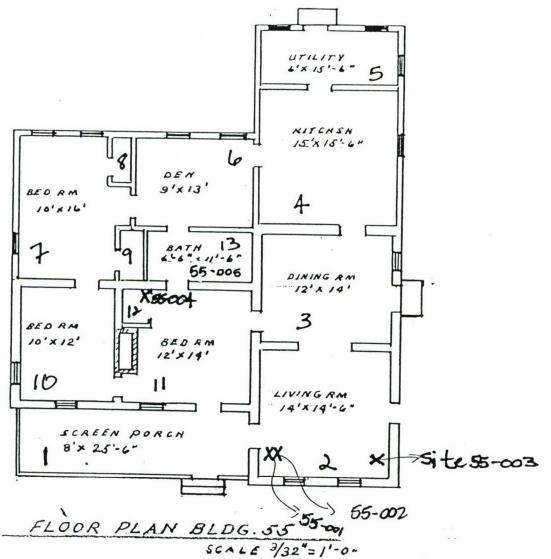


Building 54

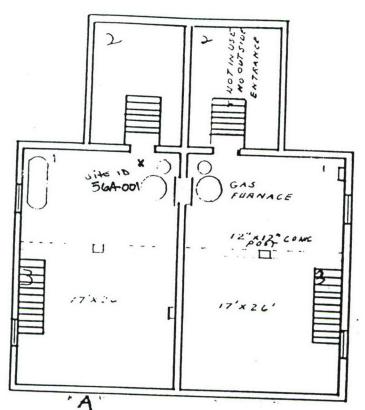




10 JAN 1973



5

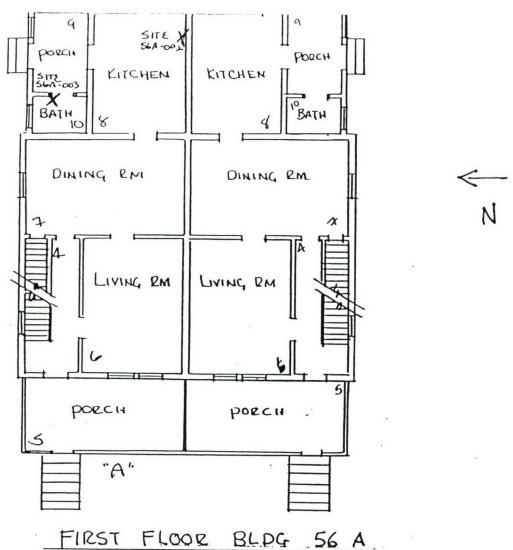


<-- N

BASEMENT 56 A-

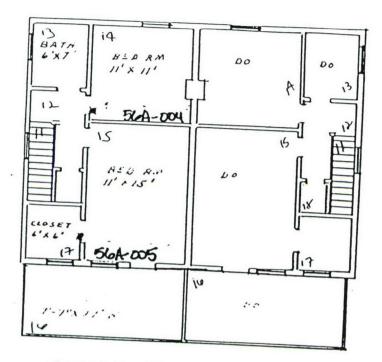
56 A

51 : mb >



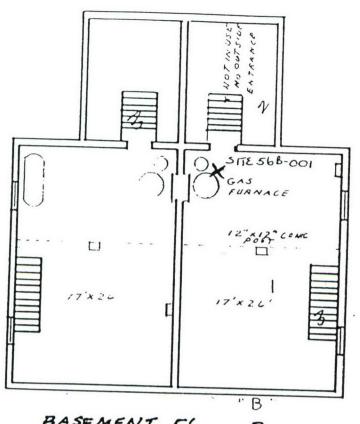
BLDG 56 A.

Affic 12a



SECOND FLOOR BLDG 56-A-

5 .. .



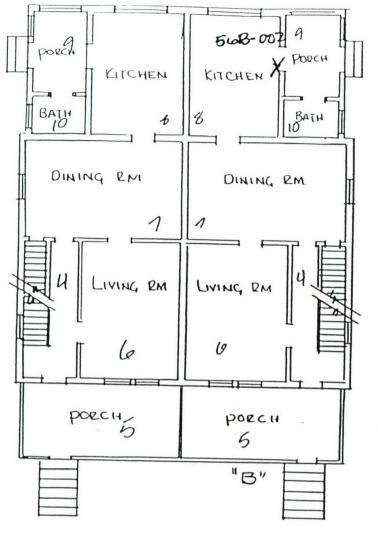
<--N

BASEMENT 56 B

56 B

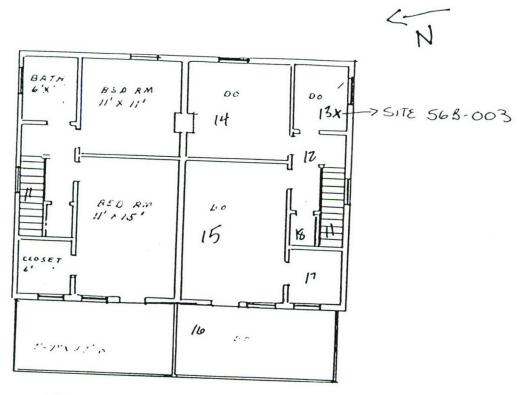
51 & max

M



FIRST FLOOR BLDG 56 B

SCALE 3/2"= 1'-0"

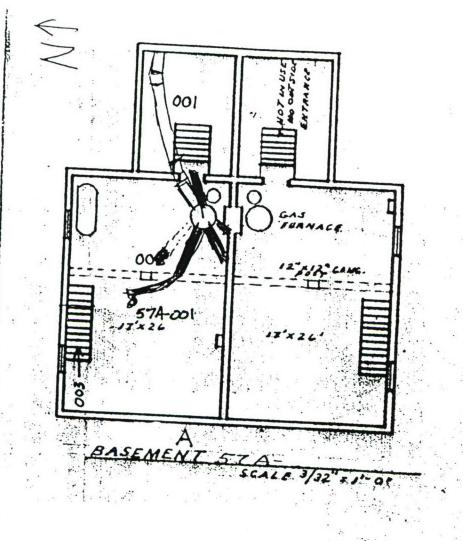


SECOND FLOOR BLOG 56 B

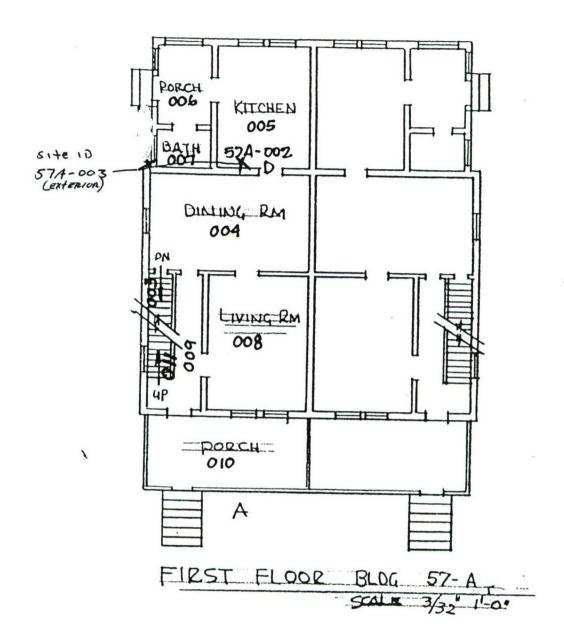
SCALE 3/32"-1'-0"

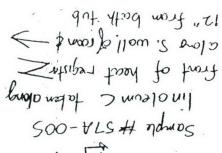
**5** ...

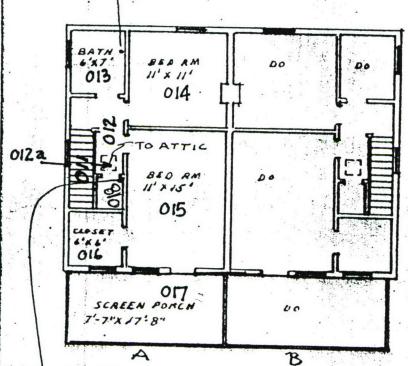
\*





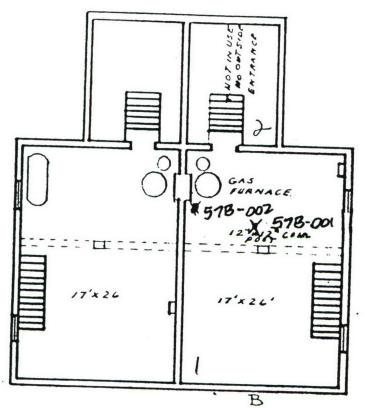




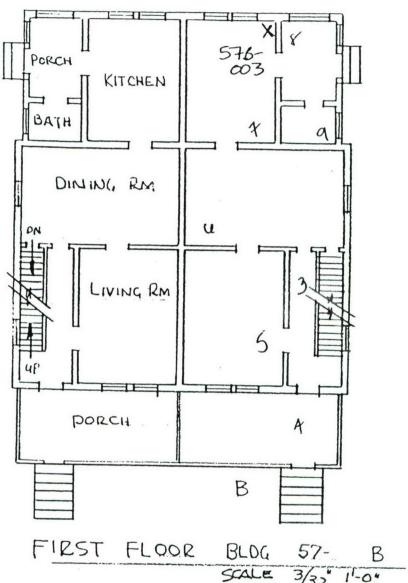


SECOND FLOOR BLOG 57 A-B

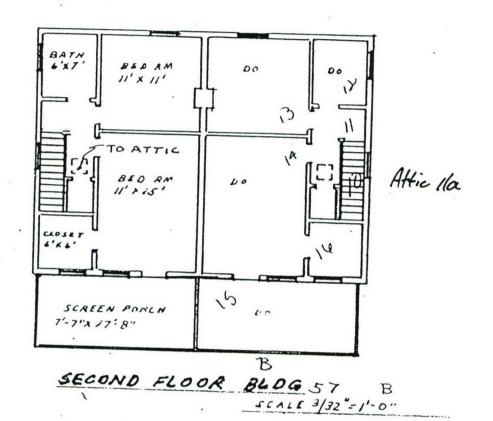
81 024 bases (d) musionil
Biose bases (d) musionil
bis that



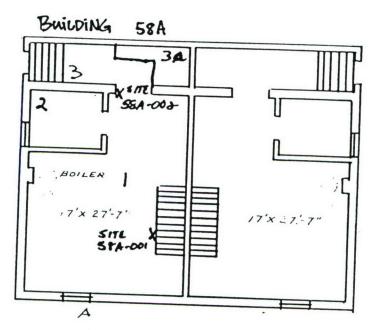
BASEMENT 57 B SCALE 3/32"=1'-0"



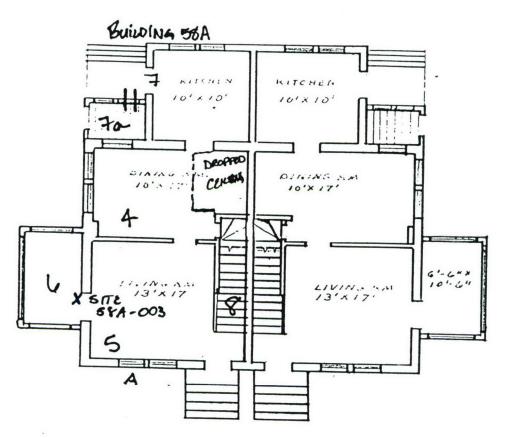
SCALE 3/32" 1-0"







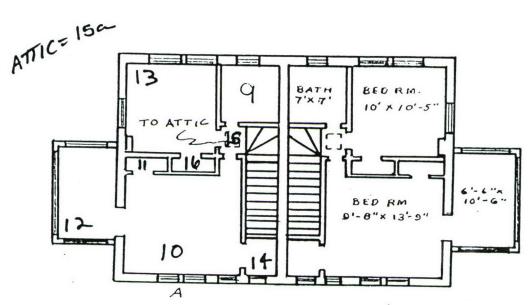
BASEMENT 58 4 3/32"=11-0"



FIRST FLOOR 58 A.

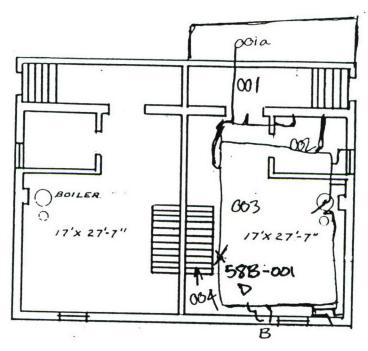
SCALE 3/32" . 1'-0"





SECOND FLOOR 58A SCALE 3/82 =1'-0"

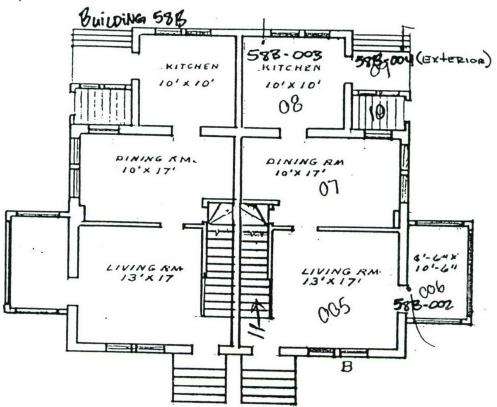




BASEMENT 58 . B SCALE 3/32" =1'-0"

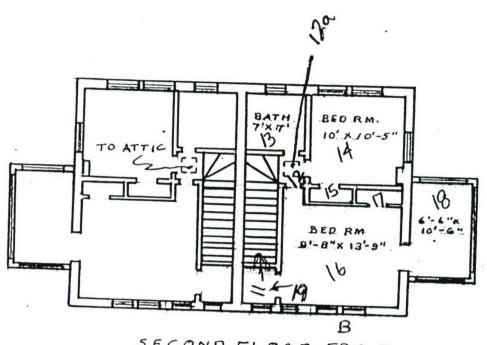
58-40-69-45



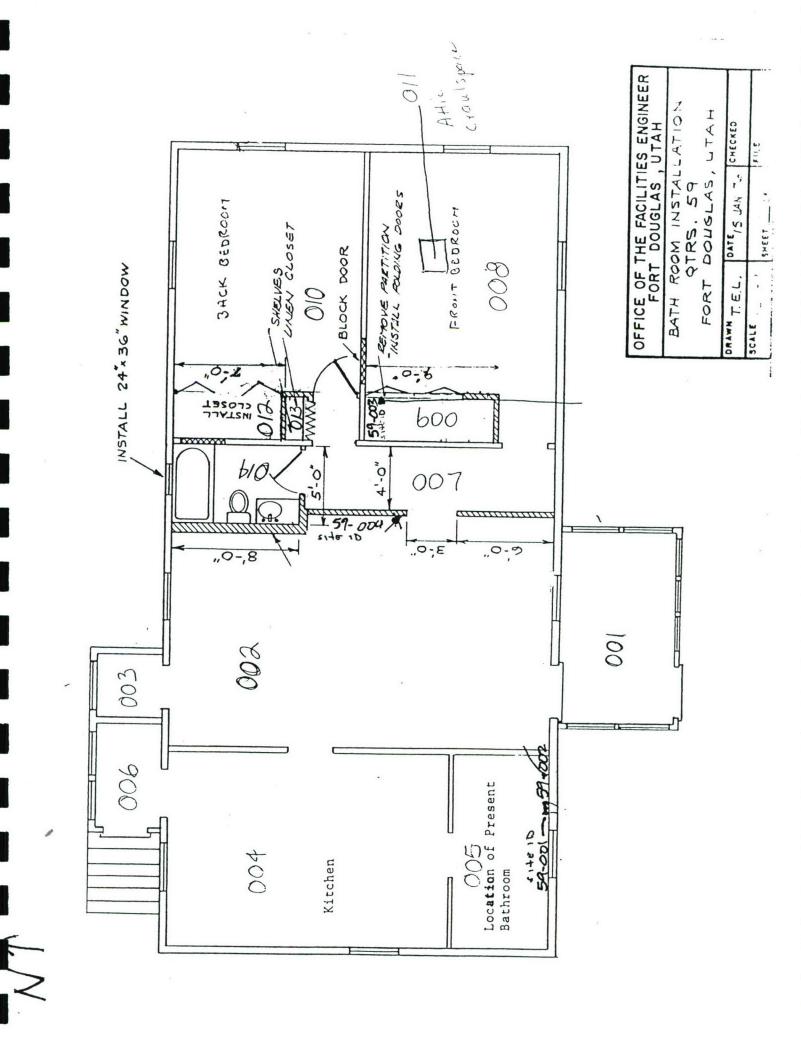


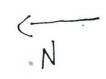
FIRST FLOOR 58 6

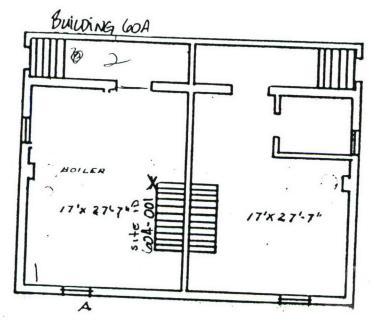




SECOND FLOOR 58 A-B SCALE 3/32 21'-0"



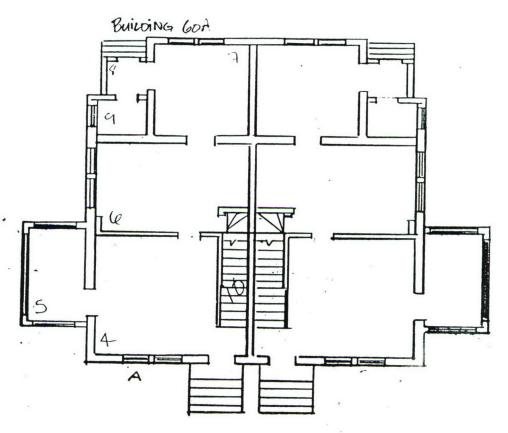




BASEMENT GO A-SCALE 3/32" =/1-0"

58.03.6.22

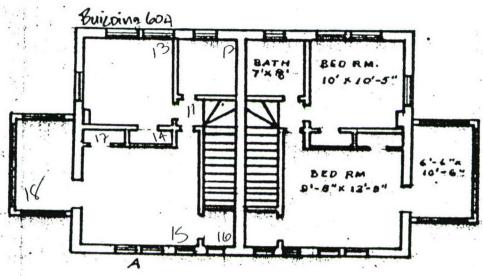




FIRST FLOOR GO A

SCALE 3/32" . 1'-0"



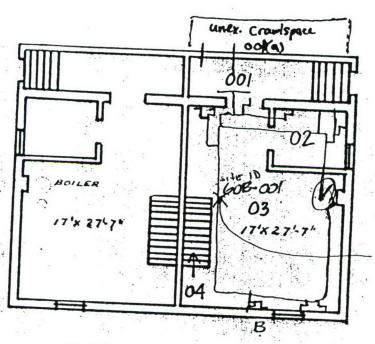


SECOND FLOOR GO A-SCALE 3/32 21'-0"

Albicilla

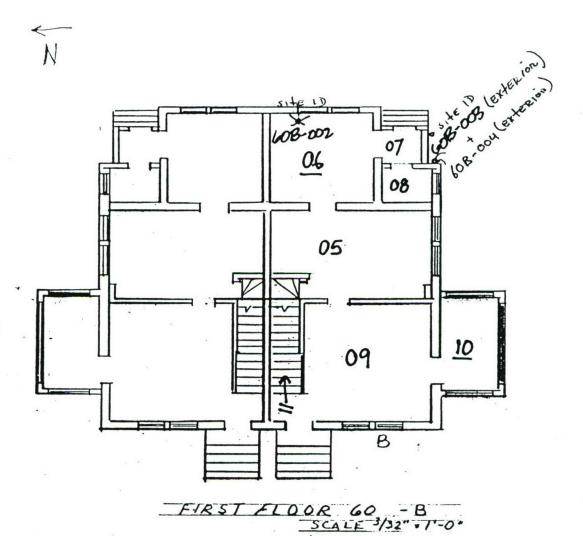
58-60 -1-1-4

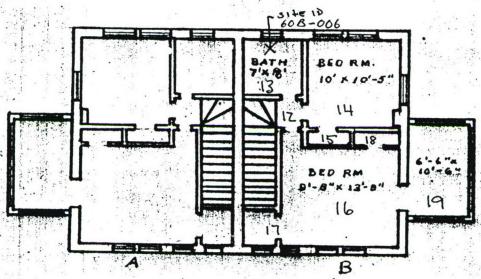




BASEMENT GO -B SCALE 3/32" = 11-0"

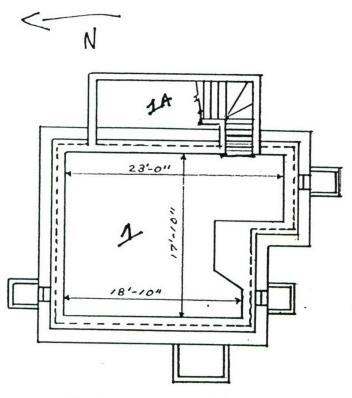
58-63-67-27



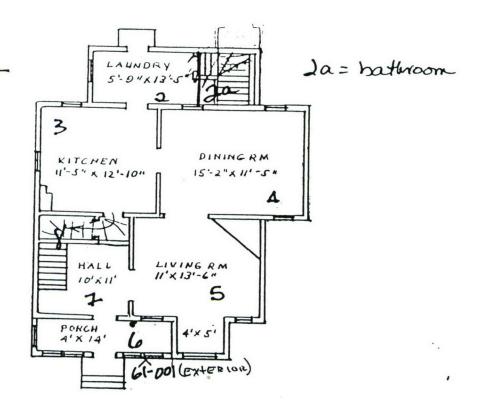


SECOND FLOOR GO A-B

58-60 - 11- 104

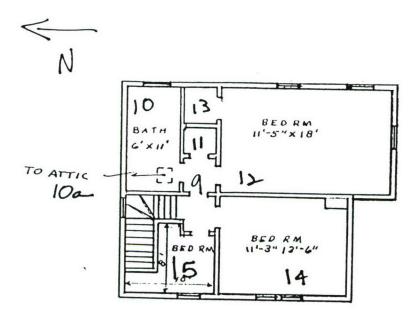


BASEMENT 61



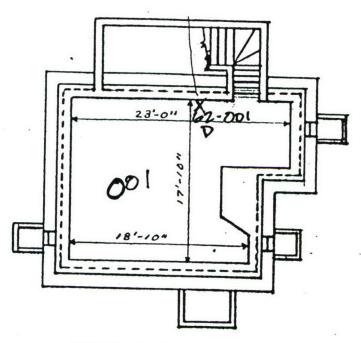
FIRST FLOOR GI SCALE 3/82"=1"-0"

41+626;



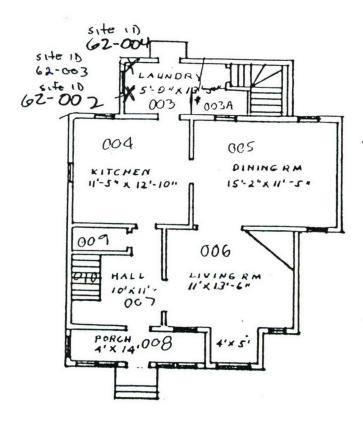
SECOND FLOOR 61 SEALE 3/32"=1'-0"

61.67



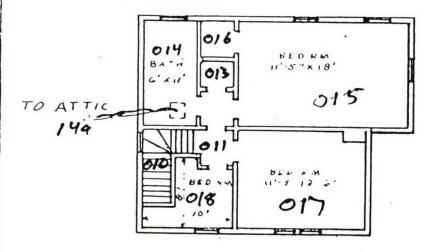
BASEMENT 62

K >



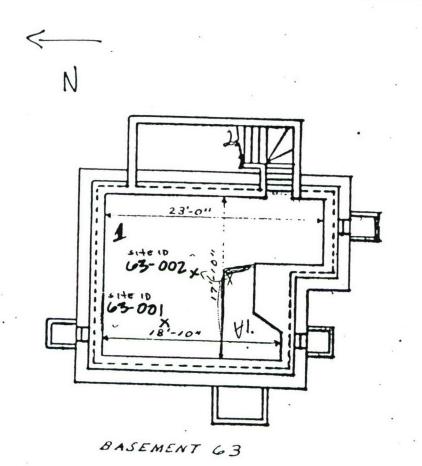
FIRST FLOOR G2 SCALE 3/22"=1"-0"

N

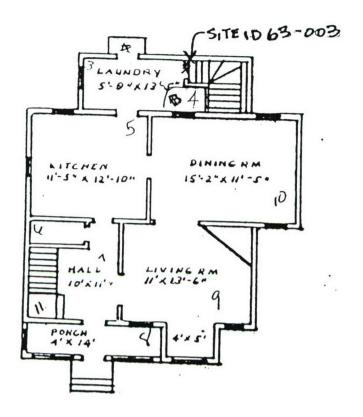


SECOND FLOOR 62

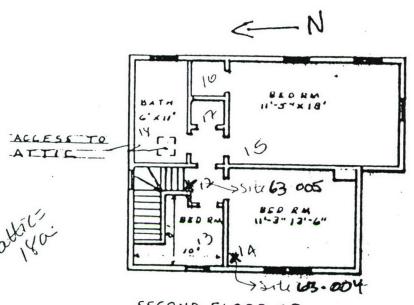
XX



61.61

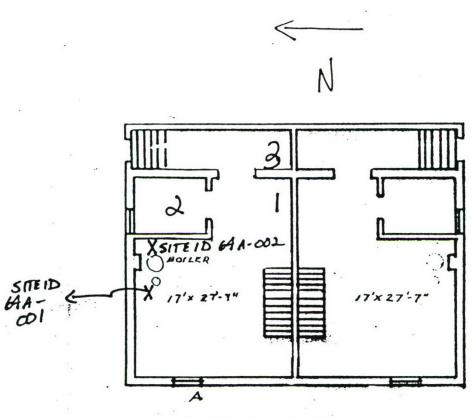


FIRST FLOOR 63 SCALE 3/22" = 1:-0"



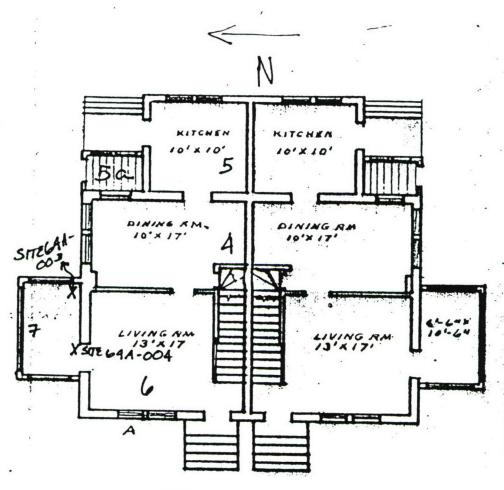
SECOND FLOOR 63

13

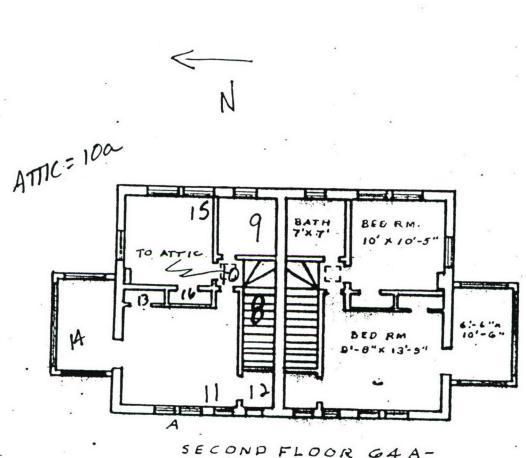


58 - 6 : -

BASEMENT 64 A-SCALE 3/32" = 1'-0"

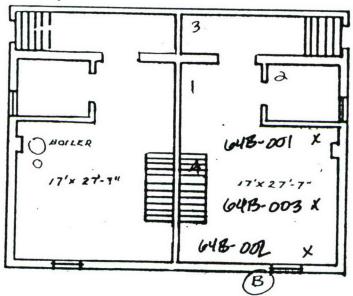


FIRST FLOOR 64 A-SCALE \$/32" . 1'-0"



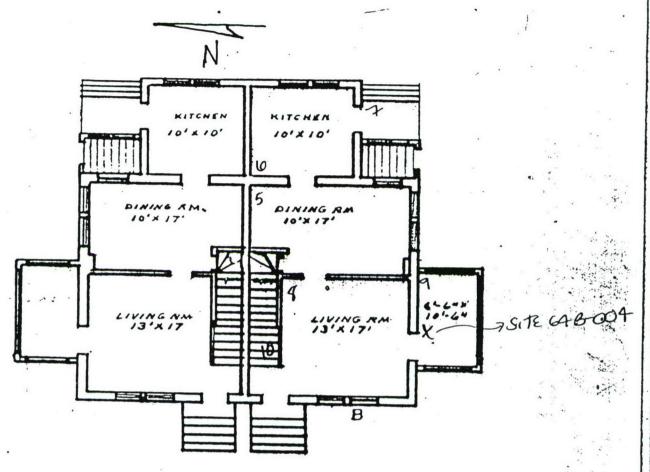
SECOND FLOOR GAA-SCALE 3/82 21'-0"





BASEMENT 64 B SCALE 3/32" = 1'-0"

58 . . .

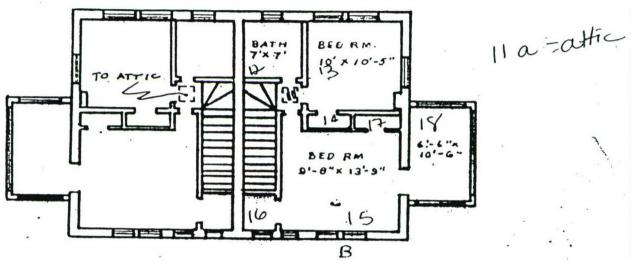


FIRST FLOOR 64 A-B SCALE 3/32" . 1'-O"

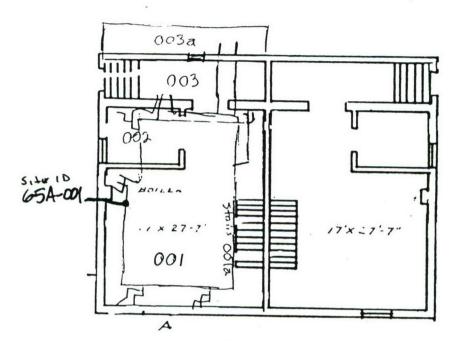
-

-

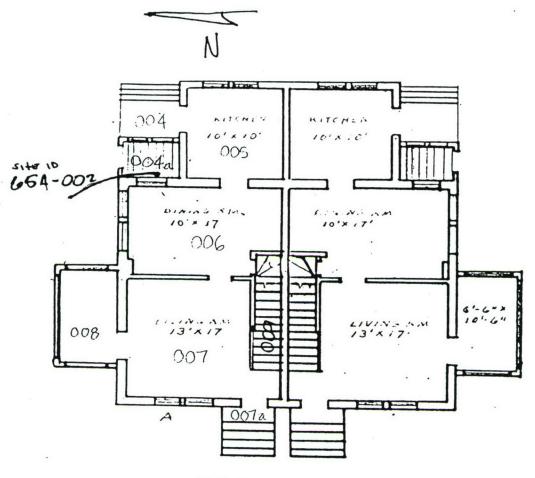




SECOND FLOOR GAA-B SCALE 3/82 =1'-0"

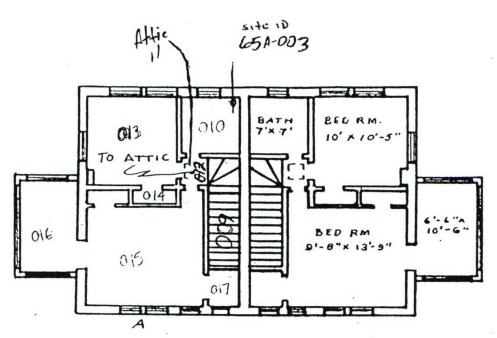


BASEMENT 65 A-B SCALE 3/32" 21'-0"



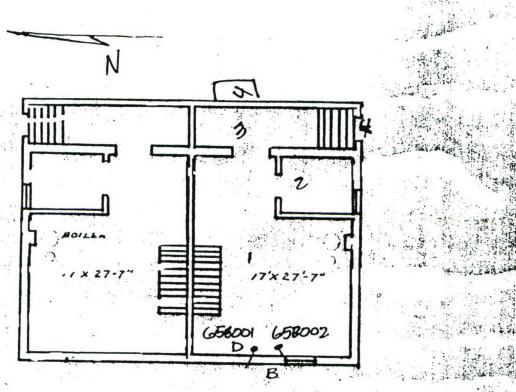
FIRST FLOOR 65 A



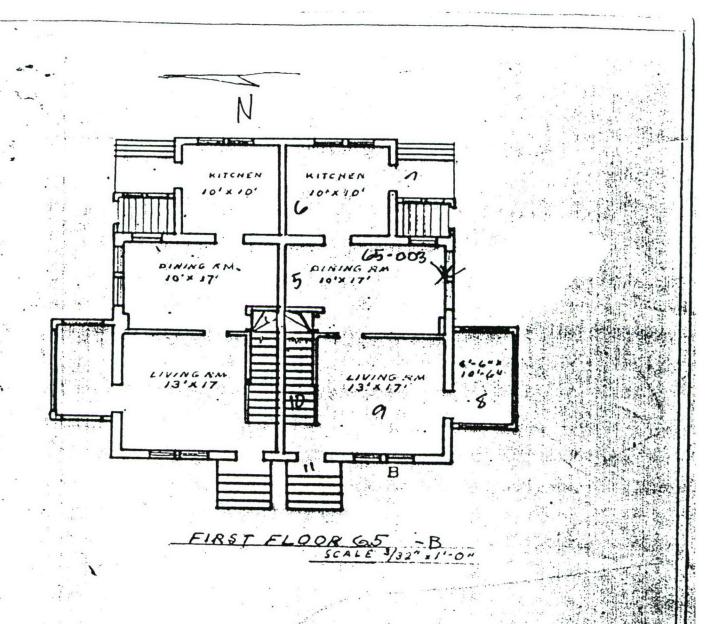


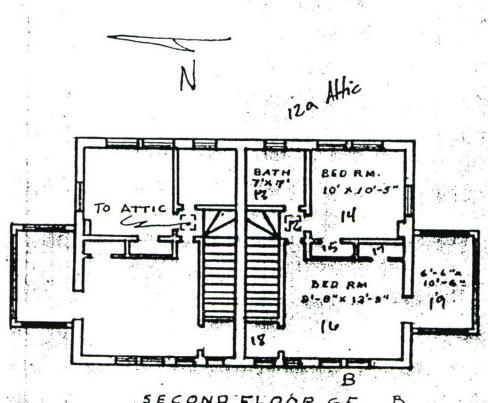
SECOND FLOOR G5 A-B SCALE 3/32 21'-0"

58-60 - 1-1-4

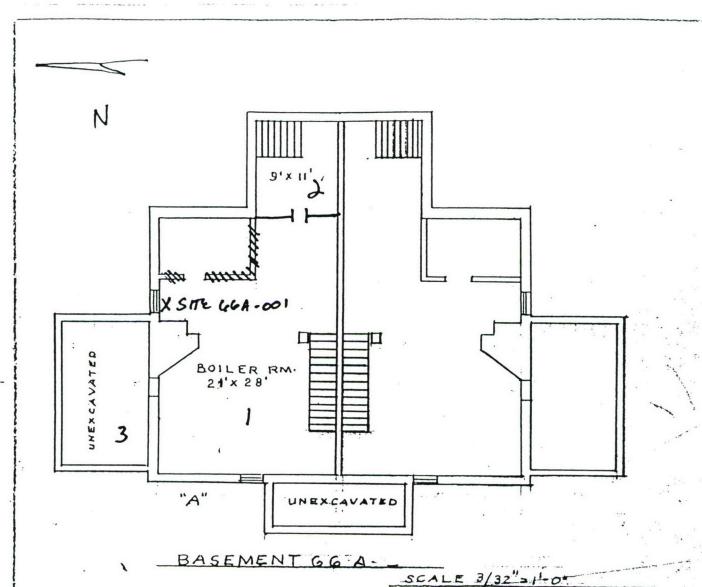


BASEMENT 65 -B SCALE 3/32" 21 OF

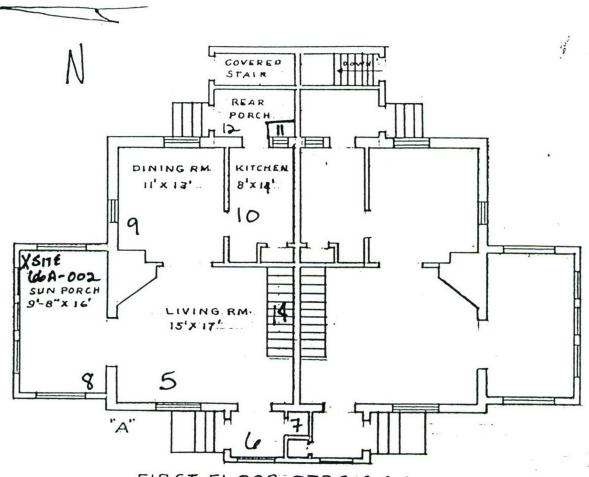




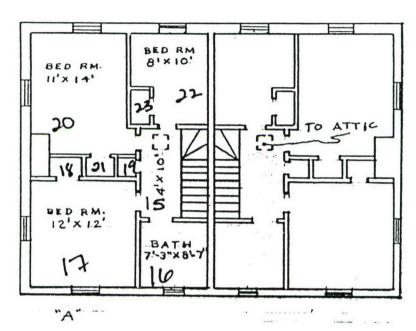
SECOND FLOOR GS. B SCALE 3/32 21'-0"



III = walls do not exist.



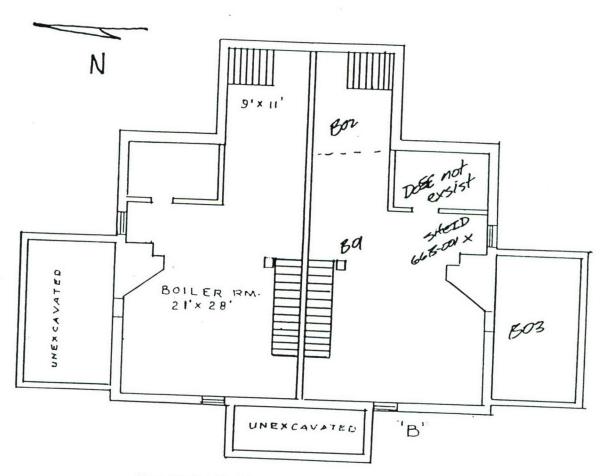
FIRST FLOOR OTRS GGA
SCALE 3/32" = 1 = 0"



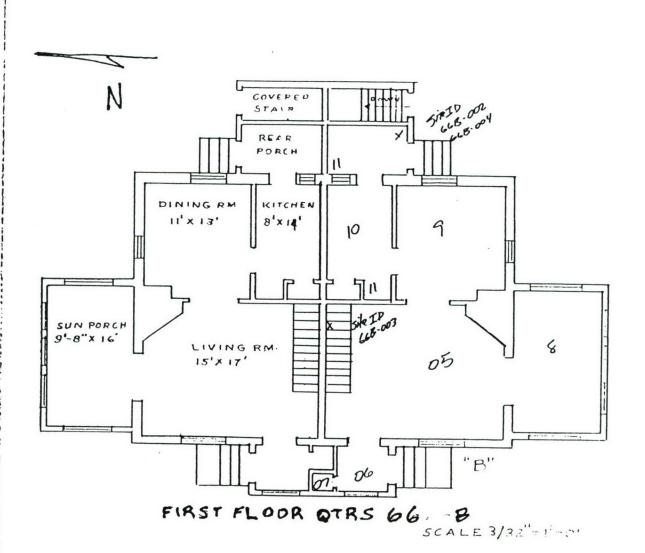
SECOND FLOOR OTRS. GGA

SCALE 3/32"=1'-0"

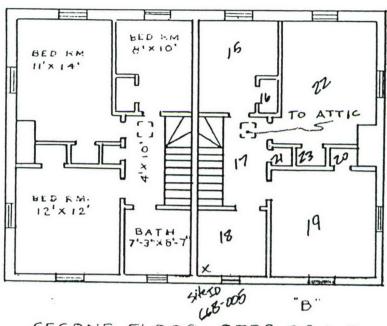
Attic= 15a



BASEMENT GG -B

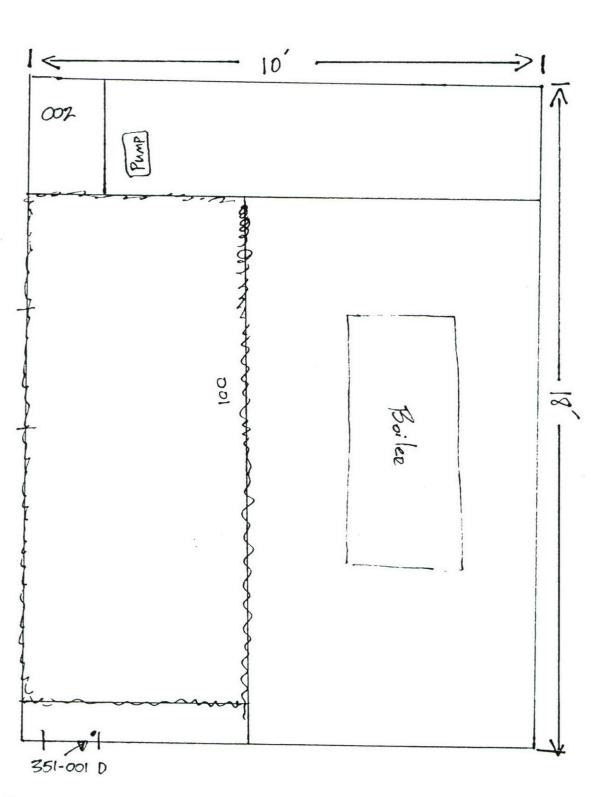


N



SECOND FLOOR OTRS. 66.1 B

SCALE 3/32"=1'-0"

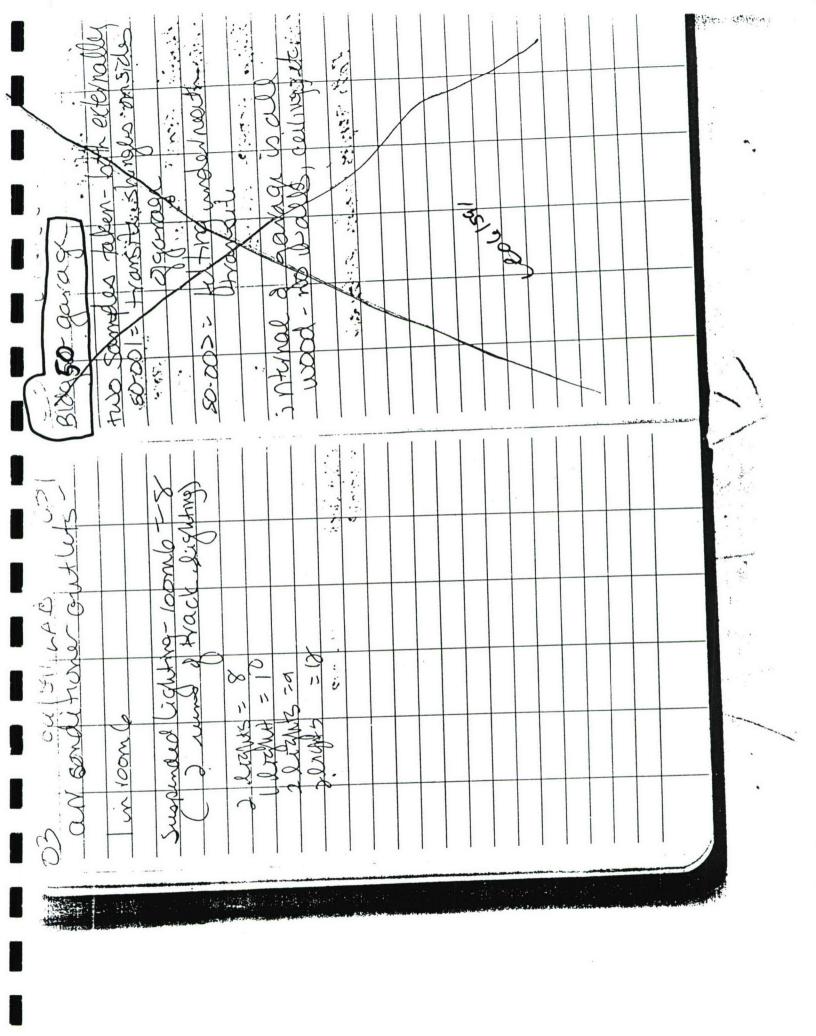


Note \*

No map at Directorate of Engineering AND Housing.

11.05 51 44252  Automore 5 44252  Automore 5 402 4 5 60 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6						
3064 51.001 1 TOURS Simbs 69.001 2064 4.000 2 TOURS Simbs 69.001 2064 4.000 2 COURS Simbs 69.001 2064 4.000 2 COURS Simbs 69.001 2064 4.000 2 COURS Simbs 69.001	25	Messe		9	Salle	
2004 - 51.00   2   March Stimber 69.00   2004 - 61.00   2   Willing 62.00   2005 - 61.	Harabane	Support	Mirkiam	31 01		#
Europe Grand 2 (elling 67.00).  Europe Grand 2 (elling 67.00).  Europe Grand 3 (elling 67.00).  Europe Grand 4 (elling 67.00).  Europe Grand 5 (elling 67.00).  Europe Grand 6 (elling 67.00).  Europe Grand 7 (elling 67.00).	1 1	. 12	2	N	mbs 69.	
Emp 620 for Carlos	Shimple			4	27	
me de crandi me crand		n	N	13	67.0	2
Euryk fake extendly  Sangle fater  Sangle fater	(12. 1000)		,	1	8	
Maker extensity  Leave the second to the sec	the same		-			
1964   Sayer faces	fath su	Haber o	dly			
Super takes takes to the same						
		3		Suns	le taken	2
			A library and the second of th			

	94BB		AD6 69 6	GARAGE	
wanten	Support	furtsiand	Home	# oping	141
5005	1 21-00/	4	Kerrit Simps	12 69.00/	
5006	100-15	N	Celting	67.00	
Map			e e		
Pall Europ	states extend	3/2			
			Sander	12/24 CAR	hally
					<u> </u>

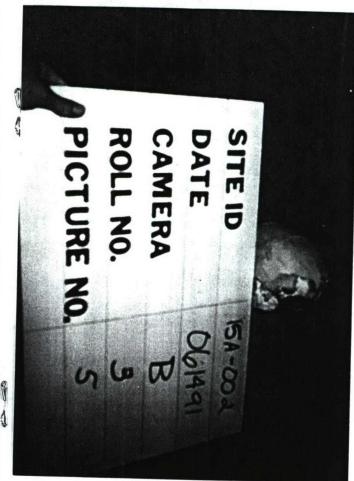


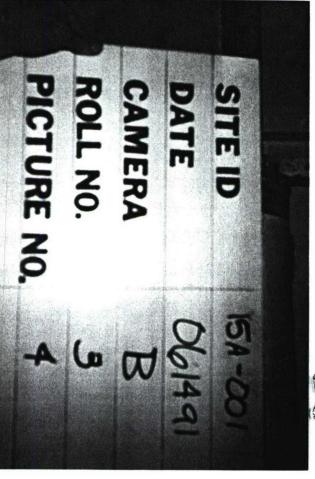
Appendix C

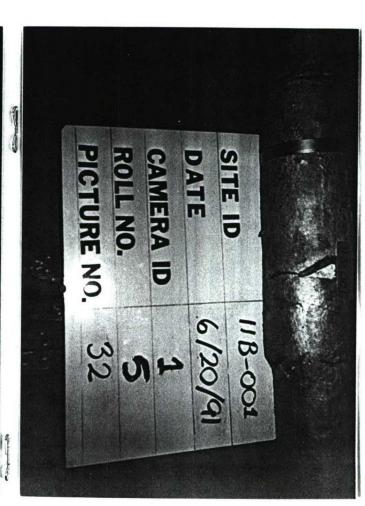
Photographics of Suspect ACM at Fort Douglas, Utah, Excessed Area

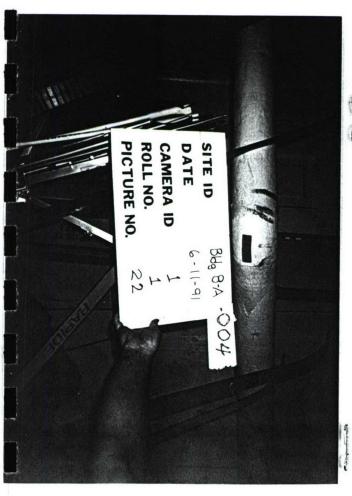
## Photographs of Thermal Systems Insulation Materials at Fort Douglas, Excessed Area

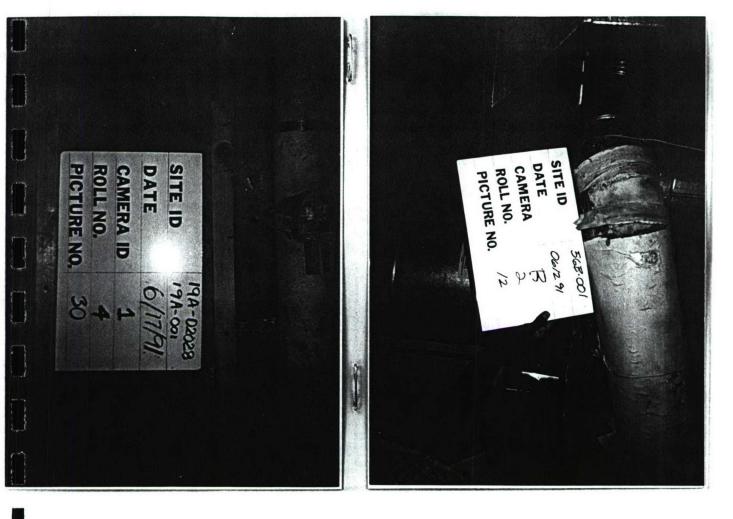
Site ID	Material Type	Analytical Results
8A-004	Joint Compound on Fiberglass	<0.5
11B-001	MAG-Block Insulation	35.0
15A-001	Wool Pipe Wrap Insulation	< 0.5
15A-002	Joint Compound	25.0
19A-001	Air Cell Insulation	55.0
56B-001	Paper Pipe Wrap Insulation	35.0











Photographs of Surfacing Material at Fort Douglas, Excessed Area

Site ID

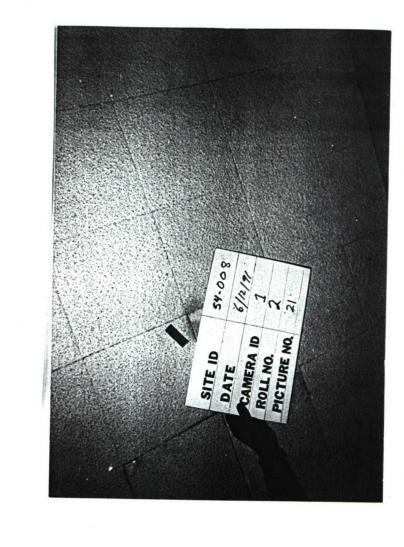
Material Type

Analytical Results

54-008

Soundproofing

8.0

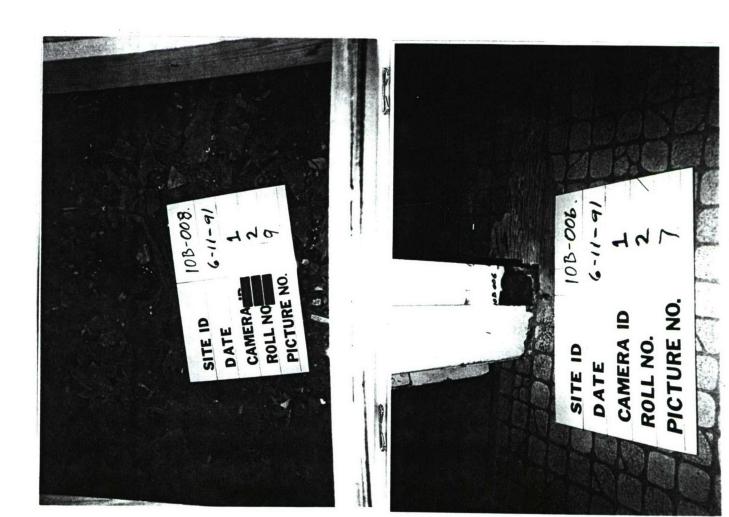


## Photographs of Miscellaneous Materials at Fort Douglas, Excessed Area

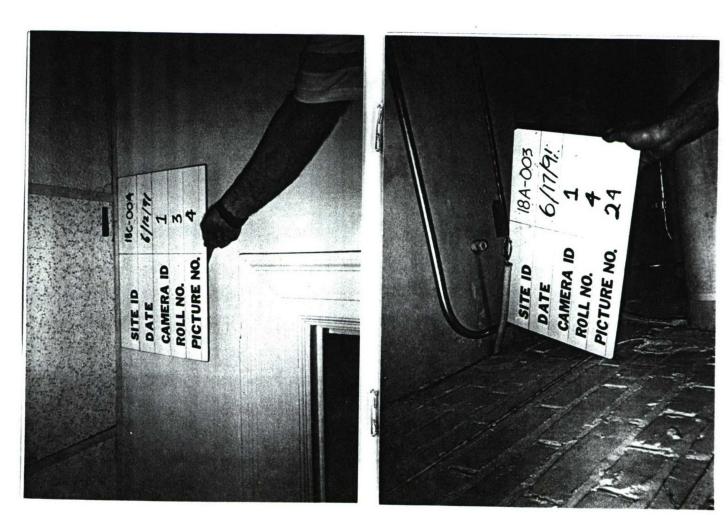
Site Id	Material Type	Analytical Results
2A-003	Ceiling & Wall Plaster	<0.5
2A-004	Textured Plaster	2.0
10B-006	Adhesive Materials	< 0.5
10B-008	Transite Panels	2.0
11A-001	2x4 Ceiling Panels	< 0.5
12A-003	Roof Shingles	< 0.5
18A-003	Wire Wrap	< 0.5
18C-004	2x4 Ceiling Panels	< 0.5
23-002	Sheetrock/Joint Compound	2.0
24-006	Roof Sealant	< 0.5
31-002	12x12 Floor Tiles	15.0
31-004	9x9 Floor Tiles	2.0
39-003	Ceiling Sheet Panels	< 0.5
49-004	12x12 Ceiling Tiles	< 0.5
49-006	White Powder (unknown)	< 0.5
52-001	Tar Paper	< 0.5
53-004	2x2 Ceiling Panels	< 0.5
54-011	Sheetrock	< 0.5
58B-004	Transite Panels	70.0
62-001	Ceiling Paper	<0.5
351-001	Concrete Expansion/Joint Material	<0.5











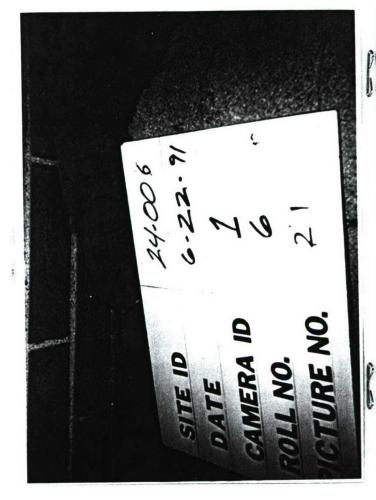




28-007

SITE ID DATE PICTURE NO.

CAMERA ID





DEAM

CAMERA ID

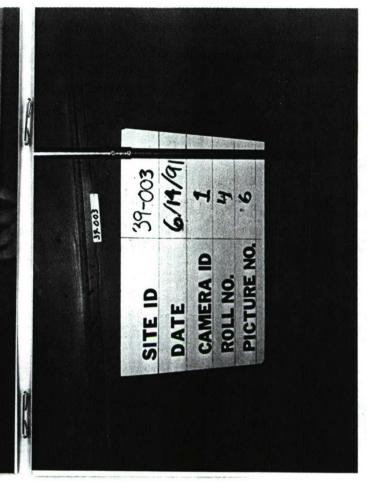
ROLL NO.

PICTURE NO.

49-009

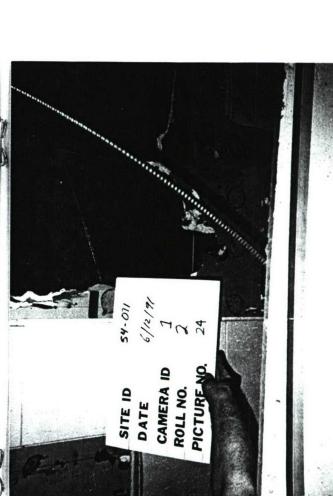
SITE ID

DATE



O. 25.





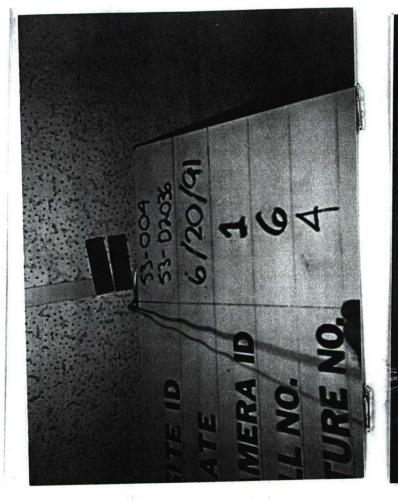
16/81/9

URE NO.

NO.

**IERA ID** 

62-001

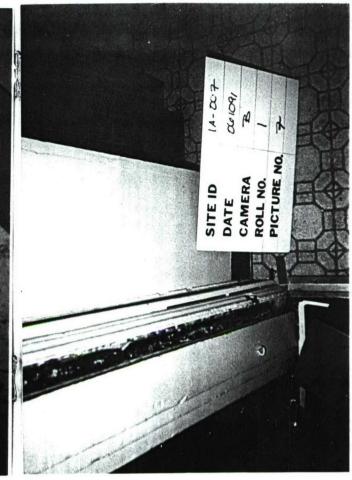


SITE ID 351-001 SST-001 SST-00

## Photographs of Asbestos Containing Linoleum at Fort Douglas, Excessed Area

Site ID	Analytical Results
1A-007	30.0
2A-009	3.0
2B-006	50.0
3-004	25.0
5-002	24.0
5-006	24.0
6B-005	20.0
9A-004	20.0
12B-004	25.0
23-003	25.0
24-003	18.0
25-004	15.0
31-004	2.0
49-010	20.0
54-007	15.0
55-005	15.0
56A-003	35.0
56A-004	20.0
57A-002	24.0
57A-004	23.0
65A-002	20.0













68-005

SITE ID

DATE

16-21-91

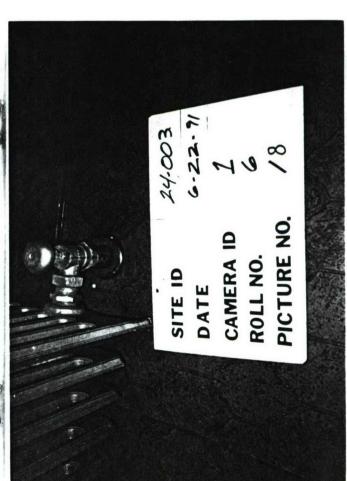
CAMERA ID

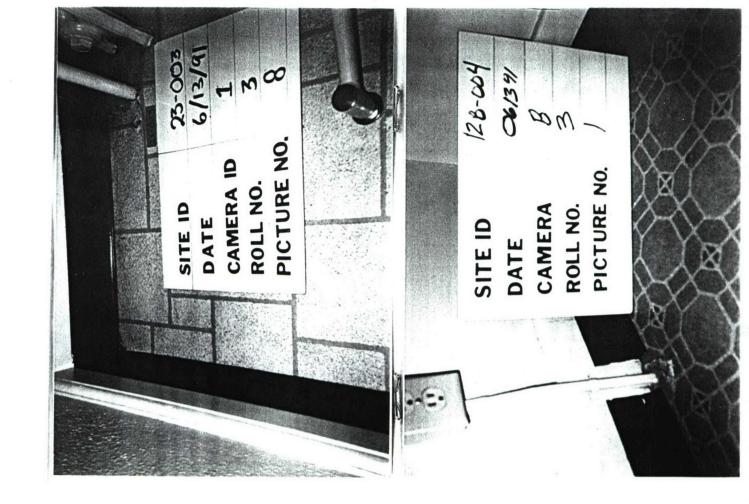
ROLL NO.

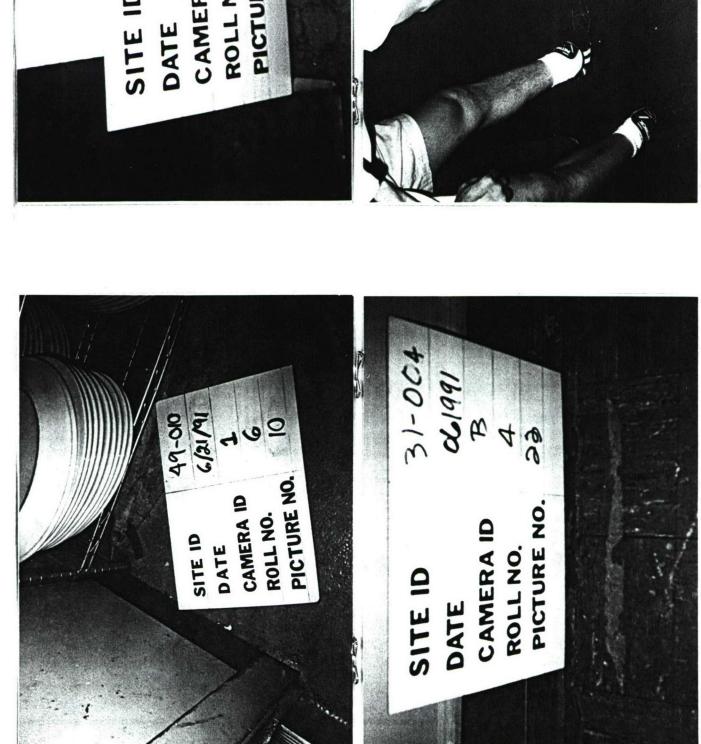
PICTURE NO.



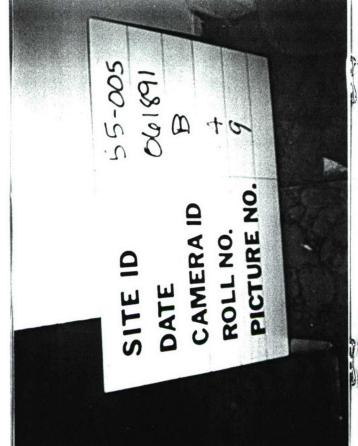


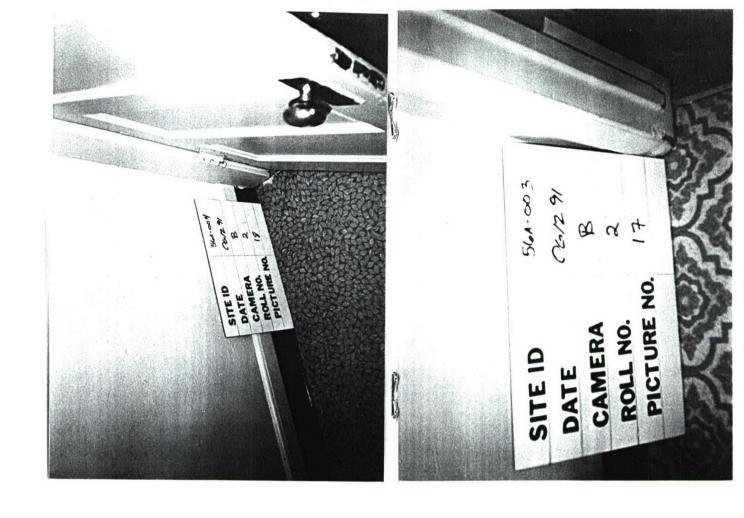






DATE
CAMERA
ROLL NO.
PICTURE NO.



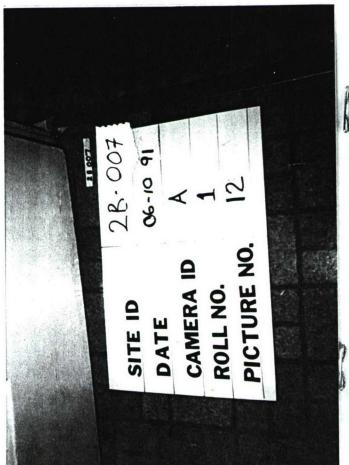




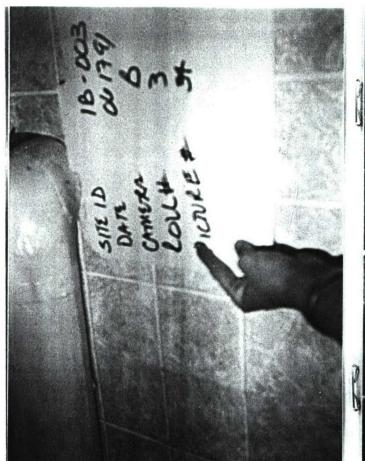


## Photographs of Non Asbestos Containing Linoleum at Fort Douglas, Excessed Area

Site ID	Analytical Results
1A-006	<0.5
1B-003	< 0.5
2B-005	< 0.5
2B-007	<0.5
3-003	< 0.5
3-005	<0.5
4-001	< 0.5
4-002	< 0.5
6A-004	< 0.5
6B-004	<0.5
6B-007	< 0.5
8A-008	< 0.5
10B-007	< 0.5
11B-003	<0.5
11B-004	<0.5
14B-002	<0.5
17A-004	<0.5
18A-004	<0.5
18B-003	< 0.5
25-003	<0.5
31-003	<0.5
49-008	< 0.5
56B-002	< 0.5
57A-005	< 0.5
59-003	< 0.5
62-004	< 0.5
63-004	< 0.5
63-005	< 0.5
65B-003	< 0.5
66B-004	<0.5







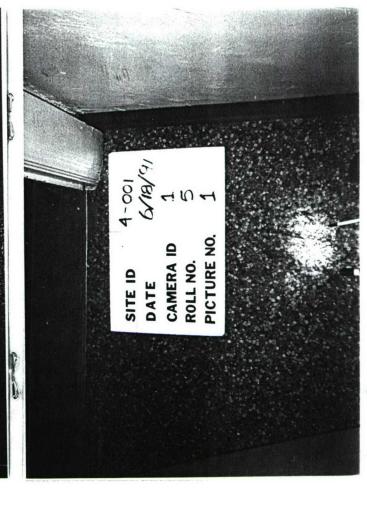




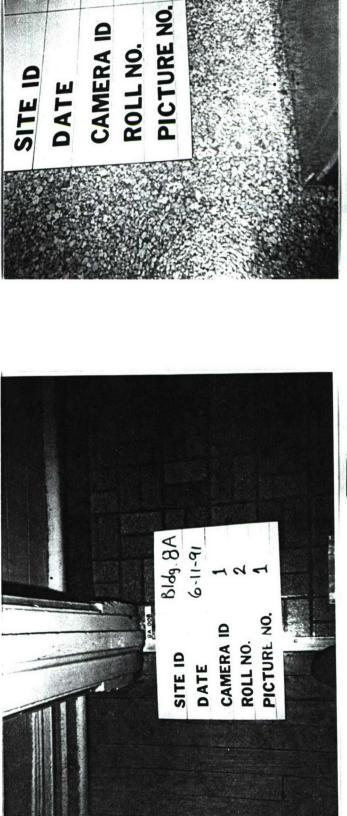
PICTURE NO.

CAMERA ID ROLL NO.

SITE ID DATE

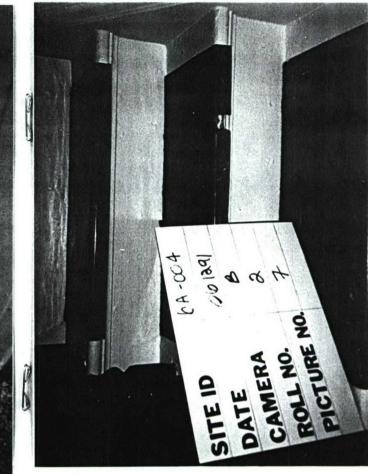


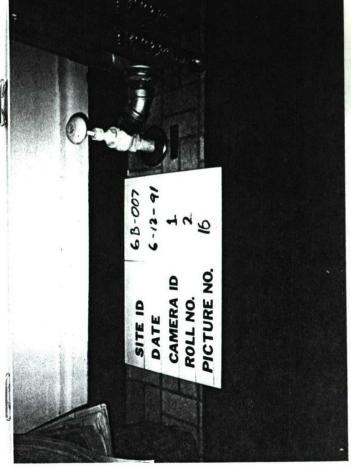




6-13-91

6B-004









118-004

SITE ID

6/20/91

DATE

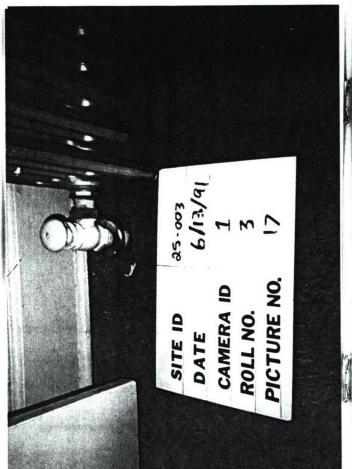
CAMERA ID

JOFT NO.

34

URE NO.







6/18/91

40

CAMERA ID

ROLL NO.

PICTURE NO.

17 A-004

SITE ID

DATE

